

GENERAL NOTES

GENERAL CONDITIONS

THESE PLANS ARE INTENDED AS GUIDELINES FOR U.S. DEPARTMENT OF ENERGY'S 'BUILD AMERICA PROGRAM IN ALASKA'. IT IS THE INTENTION OF THE DESIGNERS TO INTRODUCE ENERGY EFFICIENT AND COST EFFECTIVE TECHNOLOGIES THROUGH THESE PLANS. NO GUARANTEES OR ABSOLUTES ARE IMPLIED ON THE ACTUAL PERFORMANCE OF THIS STRUCTURE. ALL LOCAL OFFICIALS SHOULD REVIEW THESE PLANS AND MODIFY TO ADDRESS LOCAL CONDITIONS AND CODES.

- ALL DETAILS, SECTIONS AND NOTES SHOWN ARE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS U.N.O.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND / OR THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS BEFORE PROCEEDING WITH ANY WORK INVOLVED.
- OBSERVATION VISITS TO THE SITE BY DESIGNERS' FIELD REPRESENTATIVES SHALL NOT BE CONSTRUED AS AN INSPECTION OR APPROVAL OF CONSTRUCTION.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY DESIGNERS OF ANY CONDITIONS WHICH MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE VISIBLE DISTRESS IN THE STRUCTURE.
- ALL WORK SHALL CONFORM TO THE BEST PRACTICES PREVAILING IN THE VARIOUS TRADES COMPRISING THE WORK.
- THE CONTRACTOR SHALL ENSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC. PRIOR TO THE PLACEMENT OF CONCRETE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING FOR ALL STRUCTURAL MEMBERS DURING ALL PHASES OF CONSTRUCTION.
- ALL CONDITIONS OF POTENTIAL INSTABILITY OF EMBANKMENTS, CUT OR FILL SLOPES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGNERS.
- VERIFY FRAMING (WHERE APPLICABLE) WITH A.C. AND PLUMBING CONTRACTORS TO INSURE PROPER INSTALLATION OF DUCTING AND PLUMBING.
- DO NOT SCALE THE DRAWINGS.
- ALL WALL DIMENSIONS ARE TO FACE OF STUD. U.N.O.
- GRADES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS PRIOR TO START OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM COORDINATION WITH STATE AND LOCAL AUTHORITIES AND UTILITIES.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SANITARY TOILET FACILITIES THROUGHOUT THE CONSTRUCTION. CHEMICAL TOILETS SHALL BE OF AN APPROVED TYPE AND SHALL BE SERVICED REGULARLY.

BUILDING CODE REQUIREMENTS

- ALL WORK SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE WITH THE BULKY AMENDMENTS.
- WATER HEATERS ON WOOD FRAMED FLOORS TO REST ON GALVANIZED STEEL PAN WITH FLOOR DRAIN.
- GUARDRAILS SHALL BE PROVIDED AT ALL UNENCLOSED FLOORS WHICH ARE MORE THAN 30 INCHES ABOVE GRADE OR FLOOR BELOW. GUARD RAILS SHALL NOT BE LESS THAN 36 INCHES IN HEIGHT. GUARDRAILS AND HANDRAILS SHALL HAVE INTERMEDIATE RAILS SUCH THAT AN OBJECT 4 INCHES IN DIAMETER CANNOT PASS THROUGH. (UBC SEC. 1111 AS AMENDED)
- FOR EMERGENCE AND ESCAPE ROUTE, EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE WINDOW WITH A MINIMUM CLEAR NET OPENING OF 5.7 SF WITH A MINIMUM CLEAR DIMENSION OF 20 INCHES, AND A MAXIMUM SILL HEIGHT 44 INCHES ABOVE FINISHED FLOOR.
- OPERABLE WINDOWS ABOVE THE FIRST FLOOR WHICH HAVE A SILL HEIGHT LESS THAN 30 INCHES ABOVE FINISH FLOOR SHALL BE PROVIDED WITH A GUARDRAIL OR OTHER BARRIER TO PREVENT A PERSON FROM FALLING THROUGH THE OPENING.
- PROVIDE SMOKE DETECTORS AT ALL BEDROOM AREAS. CONNECT TO RESIDENCE POWER SOURCE (110 V).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH CHAPTER 29 APPENDIX OF THE UBC 1997 EDITION FOR ALL FRAMING, EXECUTION, AND FOR VERIFICATION OF ALL LOCAL DESIGN CODES.
- PROVIDE ATTIC VENTILATION AS REQUIRED BY LOCAL BUILDING CODE.
- CLEAR WIDTH OF ALL WATER CLOSETS SHALL BE 30" MINIMUM.
- MECHANICAL VENTILATION: AN APPROVED SYSTEM OF MECHANICAL VENTILATION OR AIR CONDITIONING MAY BE USED IN LIEU OF OPENABLE WINDOWS. SUCH SYSTEM SHALL PROVIDE NOT LESS THAN FOUR AIR CHANGES PER HOUR, EXCEPT THAT IN AN INDIVIDUAL BATHROOM OR TOILET COMPARTMENT SUCH SYSTEM SHALL EXHAUST AT LEAST TWO (2) CUBIC FEET PER MINUTE PER SQUARE FOOT OF FLOOR SPACE.

SHEETMETAL

- ALL AIR DUCTS PENETRATING SEPARATION WALL OR CEILING BETWEEN GARAGE AND LIVING AREA SHALL BE 26 ga. min.
- PROVIDE SMOOTH METAL DUCT FOR DRYER EXHAUST IN ACCORDANCE WITH IRC 2000.
- PROVIDE GALVANIZED SHEET METAL (6.5 M.) SIDEWALL FLASHING AT FULL PERIMETER OF CHIMNEYS. 6.5 M. SADDLE AT HIGH SIDE.
- PROVIDE 6.5 M. SHEET METAL FLASHING AT ANY ROOF VALLEY; EDGE OF FLASHING SHALL BE MINIMUM SEVEN (7) INCHES FROM CENTER OF VALLEY.
- PROVIDE 6.5 M. FLASHING FOR ALL VENTS AND PIPES PENETRATING ROOFS OR ROOF DECKS.
- PROVIDE 6.5 M. FLASHING AT ALL ROOF-TO-WALL INTERSECTIONS.
- PROVIDE 6.5 M. GUTTERS CONTINUOUS AT FULL PERIMETER OF ROOF. PROVIDE EXPOSED 6.5 M. DOWNSPOUTS AS NOTED ON ROOF PLAN AND BUILDING ELEVATIONS. SEE GUTTER DETAILS FOR PROFILE AND VERIFY IF GUTTER AND DOWNSPOUTS ARE TO BE EXPOSED.
- PROVIDE ALL ADDITIONAL 6.5 M. FLASHING AS SHOWN ON CONSTRUCTION DOCUMENTS OR U.N.O.
- ALL FLASHING IS TO BE 26 GA. GALVANIZED SHEET STEEL U.N.O. MEETING REQUIREMENTS OF ASTM A525. MILL PREPARED TO RECEIVE PAINT FINISH, FABRICATED AND INSTALLED IN ACCORDANCE WITH LATEST EDITION SNAEMA REQUIREMENTS AND IRC 2000.

MECHANICAL

- TYPE, COSTS AND LOCAL GENERAL CONDITIONS DICTATE APPROPRIATE HEATING SYSTEMS REGIONALLY. ENERGY MODELING FOR REGIONAL CONDITIONS SHOULD BE USED TO PROPERLY SELECT AND SIZE HEATING UNITS.
- WHOLE HOUSE VENTILATION SYSTEMS USING HRV TYPE MECHANICAL SYSTEM. REFER TO AK WARM ENERGY REPORT FOR EACH REGION FOR PROPER SIZING.
- ALL DUCTS FOR HEATING OR VENTILATION SHOULD BE LOCATED WITHIN THE CONDITIONED SPACE AND APPROPRIATELY SEALED.

INSULATION

- INSULATION SHALL BE INSTALLED IN A PROFESSIONAL MANNER AS PER MANUFACTURES RECOMMENDATIONS.
- BATT INSULATION SHOULD BE FLUFFED TO FULL THICKNESS, CUT TO FIT, AND SPLIT AROUND ALL PLUMBING AND WIRING.
- BLOWN CELLULOSE IN ROOF CAVITIES MECHANICALLY APPLIED TO FULL RECOMMENDED R-VALUE AS PER MANUFACTURES RECOMMENDATIONS.

GENERAL STRUCTURAL NOTES

DESIGN LIVE LOADS

ROOF = 50 PSF  
 q<sub>s</sub>=10.1 psf, 11.1 0  
 = 10 MPH, EXPOSURE B

SEISMIC

I=1.0, R=6  
 = ZONE 3, 2+0.30

REINFORCED CONCRETE

ALL CONCRETE - 4000 PSI, MAXIMUM W/C = 52. SUBMIT MIX DESIGN. PROVIDE AIR ENTRAINMENT OF 4% IN ALL CONCRETE. PROVIDE WATER REDUCING ADMIXTURE IN ALL CONCRETE.

UNLESS OTHERWISE NOTED, REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. SUBMIT REINFORCING STEEL SHOP DRAWINGS WITH DETAILS PER ACI 318 MANUAL OF STANDARD PRACTICE. LAP BARS WITH A CLASS B SPLICE.

WELDED WIRE FABRIC PER ASTM A105. FURNISH IN FLAT SHEETS, NOT ROLLS. LAP EDGES 1 1/2 MESH MINIMUM.

CONCRETE COVER:

FOOTINGS 3", SLABS ON GRADE 1 1/2"

FOOTINGS:

PROVIDE 2-#4 LONGITUDINAL BOTTOM BARS IN WALL FOOTINGS. PROVIDE CORNER BARS OF SAME SIZE AND NUMBER AT CORNERS AND INTERSECTIONS, 40 DIA. EACH LEG.

STRUCTURAL SAWN LUMBER:

LUMBER VISUALLY GRADED AND STAMPED PER NWFA STANDARD GRADING RULES. MOISTURE CONTENT OF LUMBER 2" OR LESS IN THICKNESS 19% MAXIMUM. STRUCTURAL LIGHT FRAMING - HEM-FIR OR DOUG-FIR (LARCH, SPECIES, NO. 2 GRADE OR BETTER).

CONVENTIONAL CONSTRUCTION PROVISIONS PER SECTION 2326 OF THE UBC, MINIMUM NAILING FOR CONNECTION OF VARIOUS COMPONENTS PER TABLE 23-11.8-1 OF THE UBC. TREAT WOOD BEARINGS ON OR WITHIN 1" OF MASONRY OR CONCRETE WITH PRESERVATIVE. USE MILD STEEL FLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING ON WOOD. ATTACH FOUNDATION PLATES AND SILLS TO CONCRETE AND MASONRY WITH GALVANIZED A307 BOLTS. USE COMMON NAILS ONLY. USE GALVANIZED FRAMING HARDWARE MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL. IGBO CERTIFICATION REQUIRED.

PLYWOOD:

PLYWOOD GRADE - CD INT - APA OR OSB WITH EXTERIOR GLUE LAID FACE GRAIN PERPENDICULAR TO SUPPORT.

ROOF SHEATHING - 5/8" THICK, 48/24 SPAN RATING.

SHEAR PANEL - 1/2" THICK, 32/16 SPAN RATING.

NAILING AT ALL PANEL EDGES AND AT ALL STUDS WITH HOLDDOVNS IS AS FOLLOWS:

ROOF SHEATHING - 10d @ 6" o.c.  
 WALL SHEATHING - 8d @ 6" o.c.

NAILING AT ALL PANEL INTERMEDIATE SUPPORTS OTHER THAN STUDS WITH HOLDDOVNS IS AS FOLLOWS:

ROOF SHEATHING - 10d @ 12" o.c.  
 WALL SHEATHING - 8d @ 12" o.c.

SOIL AND FOUNDATION

DESIGN LOADS

- ALLOWABLE SOILS BEARING (ASSUMED) 2,000 psf.
- THE BOTTOM OF THE FOOTING EXCAVATION SHALL BE AT LEAST 12 INCHES INTO UNDISTURBED NATURAL SOIL OR COMPACTED FILL.
- FILLS AND BACKFILLS SHALL BE CLEAN GRANULAR FILL PLACED IN MAXIMUM 9 INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY ESTABLISHED BY ASTM D-1557-78. THE ON-SITE CLAY SOIL OR DEBRIS SHALL NOT BE USED FOR FILL MATERIAL BELOW STRUCTURES AND BEHIND WALLS.
- THE FILL AREA SHALL BE CLEARED OF VEGETATION AND DEBRIS PRIOR TO FILLING.
- NO FOOTING SHALL BE PLACED HIGHER THAN A 2 HORIZONTAL TO 1 VERTICAL SLOPE FROM ANY ADJACENT EXCAVATION.
- CONCRETE & REINFORCING:
- USE TYPE I OR II CEMENT CONFORMING TO ASTM C 150. CONCRETE TO ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI FOR SLABS ON GRADE AND 3000 PSI FOR FOUNDATIONS. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 4 INCHES.
- ALL REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A-615 GRADE 60 U.N.O. PLACEMENT OF REBARS SHALL BE IN ACCORDANCE WITH ACI 315 AND ACI 318. ALL REBAR SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL BENDS SHALL BE MADE COLD.
- ALL REINFORCING BARS SHALL BE ACCURATELY AND SECURELY PLACED.
- LAP ALL SPLICES 24 BAR DIAMETERS, 18 INCHES MINIMUM.
- PROVIDE FLAT SHEETS OF WELDED WIRE FABRIC CONFORMING TO A105. PROVIDE 8 INCH LAP MINIMUM.

CONCRETE MASONRY UNITS

- MASONRY UNITS SHALL BE GRADE N-1 STANDARD WEIGHT UNITS CONFORMING TO ASTM C-90 WITH F<sub>m</sub> = 1500 psi. MASONRY UNITS SHALL BE CLEAN AND FREE OF ALL SUBSTANCES THAT MAY IMPAIR BOND. ALL MASONRY WALLS SHALL BE LAID WITH RUNNING BOND.
- MORTAR MIX SHALL BE ONE (1) PART PORTLAND CEMENT, THREE (3) PARTS SAND, ONE FOURTH (1/4) PART LIME PUTTY BY VOLUME OF CEMENT AND SHALL CONFORM TO ASTM C-270, TYPE S. WATER CONTENT SHALL BE THE MINIMUM REQUIRED FOR WORKING CONSISTENCY. TWENTY-EIGHT (28) DAY ULTIMATE STRENGTH SHALL BE 1800 psi.
- GROUT MIX SHALL BE ONE (1) PART PORTLAND CEMENT, THREE (3) PARTS SAND, AND (OPTIONAL) ONE TENTH (1/10) PART LIME PUTTY AND SHALL CONFORM TO ASTM C-418. GROUT FOR SPACES WIDER THAN TWO (2) INCHES SHALL CONTAIN, IN ADDITION, 1/2 PARTS PER GRAVEL, MAKING A 1:3:1 1/2 MIX. SUFFICIENT WATER MAY BE ADDED TO PROVIDE POURING CONSISTENCY WITHOUT SEGREGATION. THE TWENTY-EIGHT (28) DAY ULTIMATE STRENGTH OF THE GROUT SHALL BE 2500 psi. PROVIDE MINIMUM FIVE (5) SACKS OF CEMENT PER CU. YD. CONCRETE.
- MASONRY UNITS SHALL BE LAID TO PROVIDE UNOBSTRUCTED VERTICAL CONTINUITY OF GROUT SPACE. DO NOT ALLOW MORTAR TRIMMINGS TO FALL INTO THE MASONRY CELLS UNLESS CLEAN CUTS ARE PROVIDED TO REMOVE THE MATERIAL WHEN GROUTING IS STOPPED FOR LONGER THAN ONE (1) HOUR. CONSTRUCTION JOINTS SHALL BE FORMED AT THE TOP OF THE GROUT LIFT BY STOPPING POUR THREE FOURTH (3/4) INCH MINIMUM BELOW TOP OF UPPERMOST LIFT.
- LAP ALL MASONRY REINFORCEMENT 40 BAR DIAMETERS, 24 INCHES MINIMUM. LAPS SHALL BE WIRE TIED AT EACH END OF THE LAP LENGTH TO PREVENT DISPLACEMENT. ALL VERTICAL REINFORCING SHALL BE DOVELEED SAME SIZE.

WINDOW SCHEDULE

NUMBER	QTY	FLOOR	SIZE	DIMENSIONS	DESCRIPTION	HEADER	CODE	COMMENTS
W01	1	1	2034	24"X40"	SNGL CASEMENT-HR	2X8X20 (2)	LIVING RM	
W02	1	1	2034	24"X40"	SNGL CASEMENT-HR	2X8X20 (2)	BATH 1	
W03	1	1	2034	24"X40"	SNGL CASEMENT-HR	2X8X20 (2)	UTILITY	
W04	1	1	2634	30"X40"	SNGL CASEMENT-HR	2X8X34 (2)	GARAGE	
W05	1	1	4034	48"X40"	DBL CASEMENT-LHL/RHR	2X8X35 (2)	KITCHEN	
W06	1	1	2034	24"X40"	SNGL CASEMENT-HR	2X8X20 (2)	ENTRY	
W07	1	1	2640	30"X48"	SNGL CASEMENT-HR	2X8X34 (2)	LIVING RM	
W08	1	1	1646	40"X34"	TRIPLE CASEMENT-LHL/RHR	2X11 1/2X91 (2)	LIVING RM	
W09	1	2	4034	48"X40"	DBL CASEMENT-LHL/RHR	2X8X35 (2)	BDRM 3	
W10	1	2	4034	48"X40"	DBL CASEMENT-LHL/RHR	2X8X35 (2)	BDRM 2	
W11	1	2	2634	30"X40"	SNGL CASEMENT-HR	2X8X34 (2)	BDRM 3	
W12	1	2	2634	30"X40"	SNGL CASEMENT-HR	2X8X34 (2)	MSTR BDRM	
W13	1	2	4034	48"X40"	DBL CASEMENT-LHL/RHR	2X8X35 (2)	MSTR BDRM	
W14	1	2	1616	18"X18"	24" ROUND	2X3X21 (2)	VENT	
W15	1	2	1616	18"X18"	24" ROUND	2X3X21 (2)	VENT	
W16	1	2	2634	30"X40"	SNGL CASEMENT-HR	2X8X34 (2)	BERM 2	
W17	1	2	2034	24"X40"	SNGL CASEMENT-HR	2X8X20 (2)	BATH 2	
W18	1	3	2020	24"X24"	24" ROUND	2X4 1/8X21 (2)		
W19	1	3	1414	16"X16"	24" ROUND	2X1 3/8X19 (2)	VENT	
W20	1	3	1616	18"X18"	24" ROUND	2X1 1/8X21 (2)	VENT	

DOOR SCHEDULE

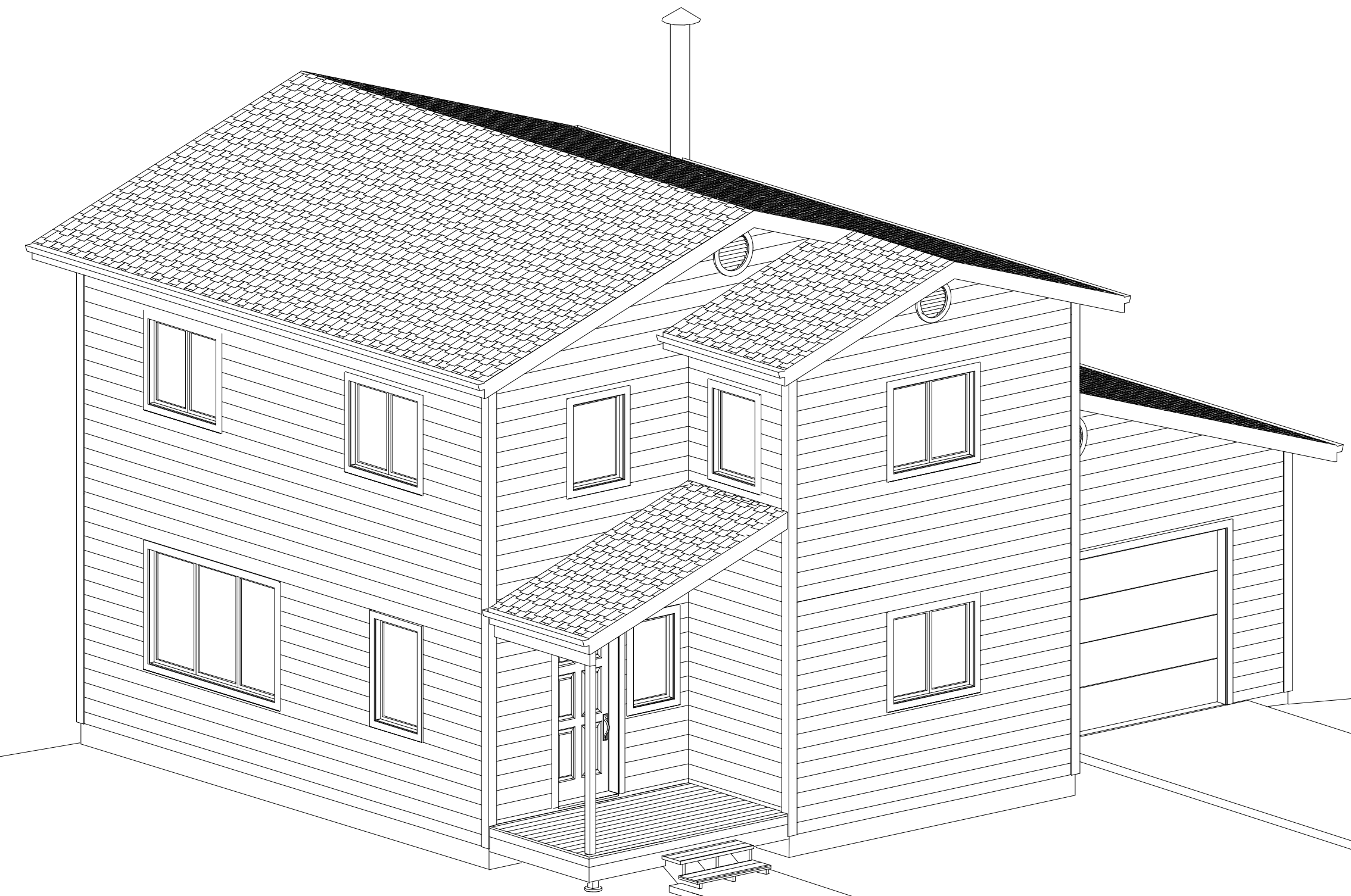
NUMBER	QTY	FLOOR	SIZE	DIMENSIONS	DESCRIPTION	HEADER	THICKNESS	CODE	COMMENTS
D01	1	1	3068	36X80X1 3/4"	EXT. HINGED - COLOR 11, OFF WHITE	2X8X40 (2)	1 3/4	GARAGE - STL	
D02	1	1	8070	46X84"	GARAGE - COLOR 11, OFF WHITE	2X11 1/2X103 (2)	1 3/4	O.H.DOOR	
D03	1	1	3068	36X80X1 3/4"	EXT. 6-PANEL	2X8X40 (2)	1 3/4	ENTRY - STL	
D04	1	1	3068	36X80X1 3/4"	EXT. HINGED	2X8X40 (2)	1 3/4	20 MIN - SG - STL	
D05	1	1	2668	30X80X1 3/8"	HINGED	2X8X34 (2)	1 3/8	BATH 1	
D06	1	1	2668	30X80X1 3/8"	HINGED	2X8X34 (2)	1 3/8	UTILITY	
D07	1	1	2668	30X80X1 3/8"	HINGED	2X8X34 (2)	1 3/8	STAIRS	
D08	1	2	2668	32X80X1 3/8"	HINGED	2X8X36 (2)	1 3/8	MSTR BDRM	
D09	1	2	2668	32X80X1 3/8"	HINGED	2X8X36 (2)	1 3/8	BDRM 2	
D10	2	2	2668	30X80X1 3/8"	HINGED	2X8X34 (2)	1 3/8	BATH 2	
D11	1	2	2468	28X80X1 3/8"	HINGED	2X8X32 (2)	1 3/8	BATH 1	
D12	1	2	2668	32X80X1 3/8"	HINGED	2X8X36 (2)	1 3/8	BDRM 3	
D13	1	2	5068	30X80"	BIFOLD	2X12X61 (2)	1 3/8	BDRM 3	
D14	1	2	5068	30X80"	BIFOLD	2X12X61 (2)	1 3/8	BDRM 2	
D15	1	2	5068	30X80"	BIFOLD	2X12X61 (2)	1 3/8	MSTR BDRM	

WINDOW NOTES :

- Verify R10 with Manufacturer
- All Windows to Vinyl w/ 3 Glaze Low E Glazing - U Value As Specified
- All Windows To Be Installed Per Manufactures Recommendations

DOOR NOTES :

- Thermal Performance - All Exterior Doors To Meet Specifications For Regional Energy Rating Tablet
- All Doors To Be Installed Per Manufactures Recommendations



SOUTH EAST ELEVATION

D R A W I N G I N D E X

SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION
A-1	GENERAL NOTES , SCHEDULES	S-1	FOUNDATION PLAN
A-2	ELEVATIONS	S-1	MAIN FLOOR FRAMING PLAN
A-2	ROOF PLAN	S-2	2 ND FLOOR FRAMING PLAN
A-3	MAIN FLOOR PLAN	S-2	ROOF FRAMING PLAN
A-3	2 ND FLOOR PLAN	S-3	BUILDING SECTIONS
A-3	CABINET ELEVATIONS	S-3	TYPICAL FRAMING DETAILS
A-4	ARCHITECTURAL DETAILS	S-4	TYPICAL FOUNDATION DETAILS
		E-1	ELECTRICAL PLAN

DATE: 10/29/2001

SCALE : NO SCALE

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REGION

INTERIOR ALASKA

50. CENTRAL ALASKA

SOUTHEAST ALASKA

SHEET

A - 1

OF 9