

Project Specifications

1. **Design Loads:**
 - a. Roof load; live-20PSF, snow-20PSF
 - b. Floor live load: 40 PSF
 - c. Sleeping rooms: 30 PSF
 - d. Wind load: 90 mph-16.4 PSF
 - e. Garage floor: 50 PSF
 - f. Deflection: floor joist beams: L/360
Roof beams/trusses: L/240
Rafters W ceiling: L/240
Rafters W/O ceiling: L/180
Exterior walls: L/240
 - g. Presumed allowable soil bearing capacity: 2000 PSF
2. **Truss Drawings:** Trusses shall be constructed such that a 24" wide X 42" high object shall not pass through more than two consecutive trusses. All trusses shall be fastened to resist the uplift shown on the truss drawings, but never less than 175 lbs. The building inspector is to be supplied with engineered truss drawings with a layout sheet prior to framing inspection.
3. **Sheathing Blocking and Bracing:** Where roof trusses are spaced more than 16" o.c., roof sheathing shall have H-clips at all seams. Wall sheathing shall have same as stud size, solid blocking at all horizontal seams. Wall sheathing shall be attached by #6d common nails 6" o.c. along all edges and 12" o.c. along intermediate stud lines.
4. **Materials:**
 - a. Concrete footers: 3,000 PSI
 - b. Foundations: 3,500 PSI W/5%-7% air entrained
 - c. Interior slabs: 4,000 PSI W/5%-7% air entrained
 - d. Garage floor & exterior slabs: 4,500 PSI W/5%-7% air
 - e. Lumber grade and species: 2X4 sill plates = #2 SYP pressure treated; 2X4 & 2X6 (over 10') studs, plates, bracing, etc..#2 pine/fir; Floor joist 11 7/8" TJI spaced as shown; Door and window headers, trusses= #2 Dense SYP
5. **Windows:**
 - a. Vinyl, Silverline D/H, WH, Low-E, Egress, W/Screens
 - b. Anderson Series 200 alum. Clad wood w/1/2" insulated glass



6. Glazing: Glass within 24" of door edges, glass over 9 sf & less than 18" above the floor shall use tempered glass.
7. Siding:
 - a. Vinyl lap and soffit.
 - b. Cement siding- lap or shake as shown,
8. Sleeping Room Egress: Each sleeping room will have a minimum of one egress window with minimum dimensions of 22" height, 20" wide; 5.7 sf., sill: 44" max.
9. Attic Access: Minimum attic access= 22' X 30"
10. Insulation: Walls = R-13, Ceiling = R-38, Joist ends = R-19, Foundation = R-6, Slab edges = R-4 (top of slab down 24"), Glazing = 1/2" insulated glass, Exterior doors and doors between garage and living area shall be insulated steel or solid wood (1 3/8" min. thickness) with weather stripping and thresholds.
11. Smoke Detectors: Smoke detectors are required at each level and inside and outside each sleeping room. All must be hard wired and interconnected with battery back-up.
12. Stone Veneer: 2" thk. Cultured stone adhered to concrete foundation per manufacturer's recommendations. (optional)
13. Brick Veneer: Weep holes (33" o.c. max.) and flashing shall be located at all base courses, sills and lintels. Tyvek house wrap shall cover sheathing behind brick veneer. Provide 1/2" min. air gap behind brick veneer. Brick ties shall be spaced 24" o.c. max. horiz. Supporting no more than 2-2/3 sf & additional ties at 36" o.c. around all openings within 12" of the opening. (optional)
14. Foundation Wall Anchor Bolts: All poured concrete foundation walls shall be 8" or 10" thick as shown on foundation plan w/ 1/2" galvanized anchor bolts spaced 60" o.c. max. and 12" from corners. Embedment shall be 7" minimum.
15. Final Grade: Final grade shall slope 6" in first 10 ft. from the building (max. 3:1)
16. Lighting & Ventilation: All habitable rooms shall be provided with an aggregate glazing area of not less than 8% of the floor area of such rooms. One half of the required area of glazing shall be openable for ventilation. Interior toilet shall be equipped with exhaust fans which provide a minimum of 75 cfm. ducted directly to the outside.
17. Soffit Vents:
 - a. Perforated vinyl



- b. 4"X 10" alum. 48" o.c.
- 18. Roof Ventilation: Continuous Ridge Vents.
- 19. Exposed Hardware: All exposed hardware (bolts, nuts, washers, screws, anchors, clips, etc...) shall be hot dipped galvanized or stainless steel.
- 20. Stair Dimensions: Maximum riser = 8 ¼", Minimum tread width = 9", Headroom = 6'8" min., Handrail Cross Section = 2 ¼", Handrail Height = 34" to 38" above nosing at 3 or more risers. Terminate handrail ends at wall or posts. Tread nosing shall be ¾" tp 1 ¼".
- 21. Exterior Doors: Insulated Steel w/weather stripping and threshold unless otherwise stipulated.
- 22. Ground Fault and Arc Fault Protection:
 - a. NEC 210-8; All 125 volt, single phase, 15 and 20 ampere receptacles installed in bathrooms, outdoors, kitchen, where outlets are installed to serve countertops shall have ground fault interrupter protection for personnel.
 - b. NEC 210-12; All branch circuits that supply 125 volt single phase, 15 and 20 ampere outlets installed in bedrooms shall be protected by an arc-fault circuit interrupter listed to provide protection of the entire branch circuit.
 - c. Smoke Detectors; Electric Contractor (EC) shall provide smoke detectors in each bedroom, hallway and living room as shown. Each smoke detector shall be AC operated with battery back-up per NFPA and local code requirements. Each smoke detector shall be interconnected in each apartment as required by code.

Energy Conservation Analysis

	Required	Proposed
Ceiling/Roof.....	R-30	R-38
Exterior Walls.....	R-13	R-13
Perimeter Fnd./Slab-on-grade.....	R-7.5	R-7.5
Opaque doors-swinging.....	U-7.00	U-7.00
Opaque doors, non-swing.....	U-1.45	U-1.45
Vertical fixed glazing (0-40%).....	U-0.57	U-0.57
Vertical oper, glazed (0-10%).....	U-0.67	U-0.67

