

Plan 1486

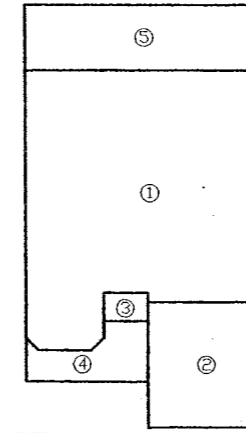
PLAN: 1486

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AREAS

| | | |
|--------------|-------------|----------------|
| ① LIVABLE | 1486 | SQ. FT. |
| ② GARAGE | 381 | SQ. FT. |
| ③ ENTRY | 31 | SQ. FT. |
| ④ OPT. EXT. | | |
| CVRD. ENTRY | +167 | SQ. FT. |
| ⑤ PATIO | 387 | SQ. FT. |
| TOTAL | 2452 | SQ. FT. |



SPECIFICATIONS

GENERAL

All construction shall conform to the applicable building codes and to all requirements and regulations of the City, County, State and/or other governing agency having jurisdiction.
 All workmanship and materials shall be fully guaranteed for a minimum period of one year from the date of substantial completion and acceptance by the Owner. Submittal of warranties, instructions, operation manuals, etc., to the Owner before final payment.
 Contractor shall provide all temporary bracing, shoring, jacking or other means to avoid excessive stresses and to hold structural elements in place during erection.
 It is the responsibility of the contractor to clean up all packaging cartons, containers, trash and debris upon completion of work.
 It is the responsibility of all contractors to notify the home owner of any discrepancies found in the field.

STRUCTURAL DESIGN DATA

| | |
|-------------------------|---|
| Use Loads | Roof - Plca 4: 12 - 20 psf Shrugs & ball up roof - 15 psf Ride Roof - 8 psf Floor & Balcony - 10 psf |
| Dead Loads | The Roof - 21 psf Shrugs & ball up roof - 15 psf Ride Roof - 8 psf Floor & Balcony - 10 psf |
| Wind Force | 90 MPH (See Calc's for exposure) |
| Seismic Design Category | C |
| Soil Bearing Pressure | Per soils report or 1000 psf. |

FINISHES

All existing finished public sidewalks, curbs, streets, utilities and grade elevations disturbed or damaged by the contractor shall be restored to proper quality as a part of this contract.
 Strip and remove: all vegetation, any existing debris or rubble, all existing fill zones or stockpiles and any obviously loose surface soils. Surface fill may be constructed with on-site topsoil provided that one placed and maintained of materials conforms between optimum and optimum plus 2%. Imported soils may be used if they exhibit low expansion characteristics.
 Provide termite protection under all concrete floor slabs. Concentration shall not be less than: Terpenox 0.5X, Denson T.C. 0.25X or 0.5X or Dyprep 0.5X.

CONCRETE

Concrete in footings, stems, floor slabs, walls and other shall have a compressive strength of 2500 PSI at 28 days minimum unless noted otherwise. Footings shall bear on firm undisturbed soil or an engineered pad certified by an independent soil test - see details.
 Concrete coverage for reinforcing steel shall be 3" minimum.
 Interior slabs shall receive a smooth trowel finish. Exterior slabs shall receive a "silt" or light "trowel" finish. (U.N.O.)
 Provide anchor bolts per foundation plan, sheared plus and details. All foundation sizes and slab thicknesses are per details (U.N.O.).
 Concrete slabs shall be 4" thick minimum (U.N.O.). Provide 4" minimum 3/4" hose course under all interior concrete slabs (U.N.O.).

MASONRY

Concrete masonry units shall be grade "N", Fm = 1350 P.S.I., ASTM C-90.
 Masonry mortar shall be type "S", Fm = 1800 P.S.I., ASTM C-270.
 Concrete grout: Fm = 2000 P.S.I., ASTM C-94.
 Reinforcing Steel: Fm = 40 P.S.I., A615-40. (#5 reinforcing bars and smaller)
 All concrete masonry units shall be reinforced as follows: install vertical steel at all corners, intersections, and ends of walls, at each joint of all openings and as shown and detailed on the drawings. Provide Bar-0-Wire 9 gauge reinforcement at 16" o.c. vertical. All walls with doors shall be grouted solid.
 Masonry veneer shall be installed per Section R203.2.2 2003 I.R.C.

MEANS

Structural steel: Fy = 35 K.S.I., ASTM A-36.
 Machine bolts: Fy = 33 K.S.I., ASTM A-307.
 Expansion bolts: Wegt, Dymador, Phillips or equal.
 Anchor bolts: Fy = 33 K.S.I., ASTM A-307.
 Weld electrodes: E70 E21 K.S.I., AWS A5.1.

CARPENTRY

All exterior sill plates shall be treated or foundation treated per Section R202.2003 I.R.C. Exterior sill plate shall be soaked and balled to foundation wall per detail.
 All pre-manufactured roof and floor trusses shall conform to E301 and TPI standards and shall be manufactured by a CEI approved fabricator. Truss drawings shall bear the seal of an engineer holding current registration in the State of Arizona.
 It shall be the responsibility of the fabricator of the structural units to design the units and to submit structural calculations for approval. Structural calculations shall bear the seal of an engineer holding current registration in the State of Arizona.
 Laminated wood beams shall be manufactured using steel reinforced Douglas Fir, with design and fabrication conforming to Standard Specifications for Structural Glued Laminated Timber (NDS) Laminated beams shall be 24"-V4 for simple spans and 24"-V4 for cantilever spans, with architectural finish of interior applications and rough saw finish of exterior applications. All cross member shall have slumps of 1/8" or approved leveling member. Roof joists, floor joists, ledgers and plates to be Hem Fir #2 or better. Studs to be Hem Fir #2 or better. Ceiling joists to be 16" O.C. non-bearing studs with 24" O.C. Studs greater than 6'-1" in length shall be Hem Fir #2 or better. Posts to be Douglas Fir #2 or better. Beams and headers of 4X material shall be Douglas Fir #2 or better. Beams and headers of 6X material shall be Douglas Fir #1 or better.
 Roof sheathing shall be 1/2" thick 5 ply CDX exterior plywood with exterior edge or 1/2" thick oriented strand board (OSB) 1/8" in equal. All panels shall be APA grade trademarked with 48/24 span sizes.
 All roof sheathing shall be installed with R30 underlayment at 6" o.c. at edges and boundary. Bd at 12" o.c. of intermediate framing members, or 16 gauge 2 1/4" x 7/16" G.D. crown galvanized steel staples at 4" o.c. at edges and boundary, and 6" o.c. at intermediate. NER #177.
 Subfloor-underlayment shall be 3/4" 1 & G 6 ply CDX interior plywood with exterior edge or 3/4" 1 & G oriented strand board (OSB) 1/8" in equal. All panels shall be APA grade trademarked with 48/24 span sizes.

Subfloor shall be fastened with construction staples and 10d nails at 6" o.c. at edges and boundary, 10" o.c. at intermediate, or 16 gauge 2 1/4" x 7/16" G.D. crown galvanized steel staples at 2 1/2" o.c. at edges and boundary and 4" o.c. at intermediate. NER #177.

Finish installation of exterior balconies shall be APA grade trademarked, 3/4" exterior. Provide Group-1, AC when any deck coating is applied directly to plywood. Group-2, 15 observe.

All sheathing shall be installed with staggered joints and the face grain perpendicular to framing members with a two span minimum.

Ties will be required of all joists along the fascia board. A fascia tie will consist of a 1"x3" (Simpson T-31) Unss plate (or equivalent) applied to the bottom side of the fascia board.

All columns and corners are to have 90 degree square corners with flat surfaces from edge to edge. No inward or outward beveling across flat portions of any column or wall.

Any split, warped or twisted lumber shall be corrected or replaced prior to completion of framing.

All gable ends and vented blocking of eaves shall have corrosion-resistant metal mesh with mesh openings of 1/4" in dimension.

MASONRY WALLING SCHEDULE: 2000 I.R.C. PER TABLE 600.2

| CONNECTION | MINIMUM |
|---|--|
| 1. Sill to sill or girder, toenail | 3-8d |
| 2. Sill to post, toenail each end | 3-8d |
| 3. 1" x 8" subfloor by each joist, face nail | 2-24" staples, 1 3/4" |
| 4. Sill to 1" x 8" subfloor to each end, face nail | 3-8d |
| 5. 1" x 8" subfloor to post or girder, head and face nail | 3-8d |
| 6. Sole plate to post or blocking, face nail | 1-16" O.C. |
| 7. Sole plate to post or blocking, at braced wall panels | 2-16" per 16" |
| 8. Top plate to stud end nail | 1-16" |
| 9. Stud to sole plate | 3-16d, topped or 2-16d, end nail |
| 10. Double top plates, face nail | 10d at 24" O.C. |
| 11. Blocking plates, top plate | 3-8d |
| 12. Blocking between joists, joists to top plate, toenail | 3-8d at 6" o.c. |
| 13. Top plates, head and intersections, face nail | 3-8d |
| 14. Compression header, two pieces | 1-16" O.C. along each edge |
| 15. Top plate to plate, toenail | 3-8d |
| 16. Compression header to stud, toenail | 3-8d |
| 17. Ceiling joists, face nail over partition, face nail | 3-8d |
| 18. Ceiling joists to parallel rafters, face nail | 3-8d |
| 19. Rafter to plate, toenail | 3-8d |
| 20. Rafter to wall, toenail | 3-8d |
| 21. 1" x 8" sheathing to each bearing, face nail | 3-8d |
| 22. 1" x 8" sheathing to each bearing, face nail | 3-8d |
| 23. Built-up corner studs | 10d at 24" O.C. at top and bottom of staggered |
| 24. Built-up girder and beams | 2-10d at ends and at each space |
| 25. 2" plank | 2-16d at each bearing |

25. 2" plank
 26. Wood Structural Panels and Parallelogram
 Subfloor, roof and sheathing (to framing):
 1/2" and less
 15/32" - 1"
 1 1/8" - 1 1/4"

Completion subfloor-underlayment (to framing):
 3/4" and less
 7/8" - 1"
 1 1/8" - 1 1/4"

27. Framing Sides (to framing):
 1/2" and less
 5/8"

28. Fiberglass sheathing:
 1/2"
 No. 11 ga. 8
 No. 16 ga. 9
 No. 18 ga. 10
 No. 20 ga. 11
 No. 22 ga. 12

29. Interior Paneling:
 1/4"
 3/8"
 5/8"
 1"

18d nails are smooth-crown, box or diamond shaped except where otherwise stated.
 24staples are 16 gauge wire and have a minimum 7/16" or diameter crown width.
 3/16th shall be spaced at not more than 6 inches on center of all supports where spans are 48" or greater.
 4 Four foot by 8 foot or 4 foot by 8 foot panels shall be applied vertically.
 5 Spacing of fasteners not indicated in this table shall be based on table R602.3(1).
 6 For regions having basic wind speed of 110 mph or greater, 8d deformed nails shall be used for attaching plywood and wood structural panel sheathing to framing within minimum 48-inch distance from gable end walls. 1 moon roof height is more than 25 feet, up to 35 feet maximum.
 7 For foreign regions having basic wind of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. When basic wind speed is greater than 48mph, nails for attaching wood roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48 inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.
 8 Opposite sheathing shall conform to ASTM 79 and shall be installed in accordance with GA 253. Fiberglass sheathing shall conform to either AW 1941 or ASTM C 208.
 9 Spacing of fasteners on floor sheathing panel edges applies to framing members supported by framing members and all of floor perimeter. Blocking of roof or floor sheathing panel edges appropiate to the framing members shall not be required except at intersection of adjacent wall planes. Floor and roof perimeter shall be supported by framing members or solid blocking.

FLOOR JOIST/TRUSS BRACING REQUIREMENTS (I.R.C. SECTION R601)

- All floor joists and trusses shall be supported laterally at the ends and at each support by one of the following:
 - Solid 2x blocking or 2x floor joist.
 - 1 x 3 wood cross bracing or metal cross bracing of equal strength.
 - Cable, 1/2" plywood panel nailed with 8d @ 6" o.c. into 2 x 4 cont. lat-toe nailer, truss ends, and top plate of bearing wall.
- Floor joist and trusses greater than 2 x 10 in depth shall also be braced at intervals as follows:
 - Solid 2x blocking or 2x bracing or 1x3 wood cross bracing of equal strength.
 - Trusses may be braced with 2x blocking cross bracing with size and spacing as specified in truss notes. (Note: must bear the seal of an engineer registered in Arizona.)

MINIMUM

| | |
|---------------|---|
| Framing Nails | #13 minimum nails |
| Masonry Nails | #7 minimum nails |
| Colling | R30 minimum blown cellulose at flat ceilings (where feasible) |

R30 minimum bolts of vented eaves.

Initial installation of all ceiling areas and/or roof areas and all vertical walls as indicated on the drawings and of areas with properly sheathed walls to form a tight, continuous envelope of all conditioned spaces.
 Clearly indicate values by placing certification cards in garage, specifying number of bags of blow, area of coverage, thickness of insulation (settled density) and R-factors of walls, ceilings, etc.

SHEDS

"Western One-Kote" Sheds system or equal shall be installed directly over open framing with studs spaced a maximum of 16" on center. Place three board, 2x8 or 2x10, horizontally with tongues or laps facing to prevent water penetration. All vertical joints must occur on studs. Sheathing is to be applied in 1/2" long vertical strips with No. 16 gauge galvanized staples spaced 5" on center. All fasteners must be long enough to penetrate the framing members 1/4". Apply the studs members to a minimum thickness of 3/8" with medium crown pressure. Plywood sheathed metal or approved plastic 1/2" J-shaped trim. Panels are used at windows where foam would be left exposed. If 4-line panels are used at windows and doors, install metal edge shall be coated with DMP acrylic-Lite No. 11465, Tremco Coatings, or other approved equal. Seal openings around hose latches, electrical panels or any holes in the substrate surface with a spray type weathering to prevent moisture penetration. Cover outside corners with metal corner reinforcement. Cover inside corners with 1/2" min. mesh tape applied to the sheathing and sealed with an exterior joint compound. Provide expansion joints in accordance with local accepted practices. "Western One-Kote" Sheds System shall be installed in accordance with E301 (R-30)S, foundation board shall be Type 1 expanded Polystyrene (E.P.S.) I.C.B.O. #19-4199 or other I.C.B.O./NER approved type. All foam applications shall comply with I.R.C. Section R703. Vapor Barrier Application shall comply with I.R.C. Section R703.2. Provide 1/2" vapor sealed 4" minimum above finished grade and 2" minimum above concrete slabs.
 Provide 1/2" asphalt impregnated sheathing in four hours of all attic areas and garage walls.
 The building safely departed will require the installation card from the stucco manufacturer approved application be with the code. Care should be taken during field installation to ensure that the horizontal joints are well sealed with the same film. Any foreign material must be removed from the interlocking grooves of each tile to assure uniform contact between the tile. All cracked or broken tiles must be replaced. Finish floor all roof areas.

One layer of grade "V" kraft paper over open framing under 1" foam styrene boards. Two layers of grade "V" kraft paper over wood base sheathing under 1/2" NS boards or foam styrene boards.
 Provide 1/2" asphalt impregnated sheathing in four hours of all attic areas and garage walls.
 The building safely departed will require the installation card from the stucco manufacturer approved application be with the code. Care should be taken during field installation to ensure that the horizontal joints are well sealed with the same film. Any foreign material must be removed from the interlocking grooves of each tile to assure uniform contact between the tile. All cracked or broken tiles must be replaced. Finish floor all roof areas.

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THE ROOFING

The roofing shall be concrete type III, I.C.B.O. #19-2953 or equal over 1 layer of 30# felt or equal.
 Installation: Lay tiles with minimum 3-inch head lap over top 30# asphalt-saturated felt underlayment in accordance with the code. Care should be taken during field installation to ensure that the horizontal joints are well sealed with the same film. Any foreign material must be removed from the interlocking grooves of each tile to assure uniform contact between the tile. All cracked or broken tiles must be replaced. Finish floor all roof areas.
 Sheathing must be structurally adequate to support the loads involved. A bin board or core board shall be installed to provide support for the head lap.
 Beams shall be 1 1/2 inch by 2 inch (nominal) spaced or decked and nailed with 6d nails at 16 inches on center. The end joints shall be supported 1/2 inch every 4 feet for full coverage. As an alternative, spacers cut from corner strips can be placed between the battens and the decking and nailed.
 Fasten tiles where required with a minimum No. 11 gauge corrosion-resistant bolt nails.

Rips and ridge tile shall be installed with ridge boards. Each ridge and hip tile is to be nailed with No. 11 gauge corrosion-resistant bolts with the ridge and hip framing members. A head of ridge's plastic should be applied to the ridge and hip to seal the joint and prevent water penetration. The ridge and hip tiles shall be nailed to the top of the ridge or valley in a manner that will maintain the integrity of each unit. Fasten ridge and coping tiles with two nails.
 Provide all valleys with No. 26 gauge corrosion-resistant metal flashing extending a minimum of 12 inches from the valley center line each way with 1/4 inch diameter ribs on part of the flashing. Each longitudinal edge of the flashing should be turned inward approximately 30 degrees plus the ridge tile to give a 1/2 inch finish. The flashing is lapped at ends a minimum of 4 inches.
 Flashing around vents, pipes, drains, etc., shall be a minimum of 3 pounds per square foot lead, copper or 27Z lead sheet minimum gage, with a lead or plastic caplet at the roof face between the flashing and the pipe and dressed down to the profile of the tile. Long lengths of flashing at parapet walls, copings, etc. where roof tiles exist, can be of rigid material such as galvanized sheet metal.
 Mortar should be used sparingly and only to provide proper bedding for hip and ridge tiles of ridge ends. The interlocking joints between hip and ridge tiles, hip and ridge tiles should be mortared. These areas are designed to be self-sealing, and mortar can cause a blockage resulting in water penetration under the tiles.

FACTORY-BUILT CHIMNEYS AND FIREPLACES

Factory-built chimneys and factory-built fireplaces shall be E80 listed and shall be installed in accordance with the limits of their listing and the manufacturer's instructions as specified in the I.R.C. section R102. The manufacturer's installation instructions and a copy of the E80 report shall be made available to the city inspector.
 Health attention of listed factory-built fireplaces shall conform to the conditions of listing and the manufacturer's installation instructions.
 Factory-built chimneys utilized with listed factory-built fireplaces may be used in a common vertical shaft having the required fire-resistance rating - UL 127 I.R.C. section R102.4.
 All gas fireplaces shall comply with Chapter 24 of the I.R.C.
 Zero clearance fireplaces to be listed per E80 #5335 or equal.

BUILT-UP ROOF

The installation of built-up roofs shall comply with section R505.8 of the I.R.C. and table R505.9.2.
 A warranted roof covering shall be any mineral aggregate surface built-up roof for application to roofs having a slope of not more than 3 inches in 12 inches. The warranted roof shall consist of 3 layers of felt, and 30 pounds per roofing square of gravel or other approved surfacing material or 250 pounds per roofing square of crushed slag.

When scuppers are required to allow water to exit roof area, contractor will fabricate metal to install inside of scuppers. Metal shall be installed prior to first layer of roofing material being applied.
 The metal used shall also have flanges that overlap on the inside of the parapet wall and sealed with lead (oil edges). It will be the responsibility of the contractor to ensure that the direction of copper metal to be correct and all sheet metal to flow from roof without causing a damming effect. It is by chance a damming effect is caused, the contractor shall correct the problem and any subsequent problems without extra cost.

Contractor shall supply and install all roof vents required by code and as shown on drawings.
 All flashing on parapet walls and house walls shall be supplied and installed by contractor per the drawings. Flashing shall be of 26 gauge painted metal - I.R.C. Section R505.9.2

DOORS AND WINDOWS

All doors and windows shall comply with I.R.C. Sections R202, R310 and R311.
 All exterior windows shall be dual pane and comply with I.R.C. section R308.
 All doors and windows shall be of the types and sizes as shown on the floor plan.
 All operable windows and sliding glass doors shall be provided with insect screens.
 All doors to be 6'-8" high, 1-3/8" hollow core at exterior, 1-3/4" solid core at exterior and garage (U.N.O.).
 All exterior doors shall have weather light gaskets and thresholds and grouted slabs.
 Finish and install all finish hardware as selected and as listed. Provide security hardware as follows (I.R.C. Section R311)

Exterior swinging doors must be solid core or rigid skin construction 1-3/4" thick with 4-5/8" minimum slab with with properly sheathed core or frame around and below the lock stile plate. All three hinges minimum per door. If hinges are on the outside, they must have non-removable pins or to be pin locked hinges.
 All doors or front entry doors must have a 180 degree door.
 Doors are to be arranged so that the occupant can view the immediate area outside the door through a window. Doors from a dwelling unit to an attached garage are also considered exterior swinging doors.

The inactive leaf of a pair of doors shall be equipped with one bolt, edge or surface mounted flush bolts top and bottom, with 1/2" minimum projection to hold firm this portion of the door.
 The active leaf of a pair of doors shall be equipped with a deadbolt, and the lock shall be key-operated from the exterior only.

Deadbolt locks are required on all exterior swinging doors and must be equipped with a minimum one inch (1") bolt three prong metal and case hardened steel, edge hardened tapered which fits the cylinder bore, and a four (4) screw strike plate across three inch (3") hole, 6 screws with 3/4" min. projection. Such locks must be operable without the use of a key. No double keyed locks shall be allowed (tested in accordance to Section R102.2 2003 I.R.C.).

All double entry doors and French doors the astragal is to be metal. The finish will vary according to the following:
 - With metal doors, the astragal will be painted to match the finish on the door.
 - With wood doors, the astragal shall have a bronze finish.

Exterior sliding doors must have the sliding section on the inside and be equipped so that it cannot be raised or removed while in the closed and locked position. An auxiliary non-keyed lock must also be installed. The stationary section shall not be removable from the outside.

Exterior windows shall be constructed and installed so as to prohibit sliding, raising or removal of the moving section, which provides egress, except when first approved by the Superintendent of Building Inspection. All exterior windows shall be equipped with adjustable storm doors shall be installed on all window units to prevent sliding. (Sleeping-room windows may not have locks which require a key or special knowledge or effort to unlock)

Garage doors shall be equipped with one of the following: cylinder-type lock or electric door operator with an automatic lock. Such locks shall be operable from the inside without the use of key or electrical power.
 All exterior doors shall be finished in the interior of the dwelling or garage. If office access door is located in the garage it shall be finished with 3/4" particle board or 5/8" type 1 gyp. bd. (see detail 6/04)

Note: These requirements are not intended to prevent use of any hardware or methods of construction not specifically prohibited, which provide equivalent security, when first approved by the Superintendent of Building Inspection.
 Note: Windows shall not be installed in a manner to prevent proper egress through doors or bedroom windows as specified in SECTION 310 or 2000 I.R.C.

The following locations shall be provided with safety glazing per Sec. R308 I.R.C.:
 Glazing in doors with dimension greater than 3".
 Glazing in fixed and sliding panels of sliding panels of sliding type doors other than weather doors.
 Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, hot tubs, and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches above a standing surface and door sill.
 Glazing in openings with bottom edge less than 18" above adjacent finished floor except glazing is provided with a horizontal member 1-1/2" in height located between 4" and 30" above floor.
 Glazing in bedrooms with bottom edge less than 60" above finish floor.
 Glazing in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within 24" of any other vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches above the walking surface.
 Skylights shall be E80 [E.R. 1998 or equal per section R308.6 of the I.R.C.

DETAILS

Provide 1/2" gyp board throughout (U.N.O.). Provide 1/2" gyp board of garage ceiling and walls conforming to house (and bearing walls) unless noted otherwise.
 Gypsum wallboard installed as a backing in sheetrock shall be type WR to 477 above drain minimum, and shall conform to I.R.C. Section R702.4.2.

Gypsum board used at exterior locations shall be exterior type (approved per I.C.B.O. [E.R. 560]).
 All gypsum board shall be nailed with a full nailing pattern and finished in accordance with the manufacturer's recommendations. All ends and edges of wall board shall occur over and be nailed to supports. Nail spacing shall conform to table R702.5.1 I.R.C. and otherwise indicated. Minimum nail-to-edge distance shall be 3/4". It shall not apply to base ceiling and wall installation. Wall sheathing shall be used where necessary. Openings cut for outlets, switches and electrical panels and exposed plastic pipe located on the roof shall be painted to match the roof. Other selection by builder.

All exterior openings on drywall shall be covered with non-corrosive metal corner bead and covered with an acceptable installation of joint compound.
 Drywall returns, complete with non-corrosive metal corner beads shall be installed at top and sides of all hi-level and hi-jack door openings. (If necessary, wall corners and openings, and covered with an acceptable installation of joint compound.)

Provide rounded corner bead (U.N.O.).
 All exterior wood and other openings shall receive two (2) coats of exterior grade paint. The first coat (prime coat) shall be a separate operation. Prime coat shall be applied within seven (7) days of completion of exterior trim.

Exterior sections of exposed exterior steel metal including access panels, fuel pumps and air conditioning duct work, flashing, gutters and down-spreads to be painted on (1) coat of metal primer and one (1) coat of exterior latex. All steel metal items and exposed plastic pipe located on the roof shall be painted to match the roof. Other selection by builder.

Immediately after installation, the garage service door and French doors should be primed inside, outside and oil edges. In addition, it should be treated with two (2) coats of high quality exterior paint on all surfaces.
 Pre-manufactured items shall be launched up as necessary, (i.e. cabinets, doors, zero clearance fireplaces, air registers, fan fixtures, etc.)

All bathrooms, kitchen walls, and ceilings will be painted semi-gloss enamel (U.N.O.). All other walls and ceiling areas will be painted flat latex or flat latex enamel (U.N.O.). All interior woodwork such as doors, base casing, etc. shall be painted latex enamel (high gloss) (U.N.O.). The top and bottom of each door must be painted of the same line as the rest of the house. All exterior paint shall be latex. All woodwork shall be sanded before painting and between coats of paint.

All interior base, casing, shaming (top and bottom), etc. shall be coated and nail holes filled. Caulk or otherwise seal around all openings in the exterior envelope of the home, of 4 feet between dissimilar materials and all junctions of masonry components, such as wall to floor. Caulking shall be a silicone base or butyl rubber base, conforming to Federal specifications (11-8-1543 and 11-5-1650).

MECHANICAL

All furnaces and air conditioners shall have a S.E.E.R. rating of 11.00 or better on all size units.
 All air conditioning and heating systems shall be designed, sized and installed by the subcontractor to maintain a minimum interior temperature of 70° (degrees) F - (I.R.C. section M111)
 Air registers shall be of closable type located per plan. Return air grilles shall also be located per plan. All registers for walls and ceilings are to be white in color.
 Provide 4" round dryer vent and installation as shown on floor plan. (Per Sec. M1501.1 I.R.C.)
 Install exhaust fan housing (supplied by manufacturer) and vent and duct from vented range hood or microwave. Seal and caulk ducts where they penetrate framing members and finish interiors, vent to exterior of structure type.
 Mechanical contractor to make final connections for condensation lines of all air handlers units.
 All mechanical equipment installed in attic shall comply per Chapter 13 I.R.C.
 Mechanical equipment shall not be visible from the public street.
 All exhaust fans shall provide live air changes per room minimum.
 Combustion air requirements and ventilation for installed gas appliances shall comply per Section G2407 I.R.C. including but not limited to water heaters, fireplaces, etc. - wall with approved double wall system.
 All ductwork in garage shall be minimum 26 gauge with no vibration isolation material in duct.
 All flexible ductwork in attic to be suspended above bottom chord of truss.

ELECTRICAL

Electrical panel shall be 200 amp, 120-240 volt, 20 circuit breaker panel equipped with breakers on all individual circuits (U.N.O.) - see electrical drawing.
 Provide 20' No.4 AWG copper wire or #4 rebar at footing for UFER.
 Smoke detectors shall be provided as noted (I.R.C. Section R317). See electrical plan.
 Ground-fault circuit-interrupter protection shall be provided as noted and per code. See Electrical plan.
 All electrical outlets and switches shall be installed to comply with Section E303 2003 I.R.C.
 All exterior fixtures shall be U.L. approved for wet locations per Section E303.8 2003 I.R.C.
 Electrical boxes of 4m outlets to comply with Section E303.2, E303.3.2, E304.5 and E306.8 2003 I.R.C.
 Two or more 20 ampere small appliance circuits shall be provided to serve the kitchen, breakfast and dining rooms. These circuits shall have no other outlets. Section E303.2, E303.2 and E304.1 2003 I.R.C.
 All other circuits shall be rated at 15 amps, and equipped with 14 gauge copper (U.N.O.).
 Condensing unit disconnect requires wiring clearances and access per Section M1305 2003 I.R.C.

All load one 20 ampere branch circuit shall be provided to serve the laundry room and one for hallrooms. This circuit shall be over the ceiling - ballrooms to be I.R.C. section E301.6 and E301.8 2003 I.R.C.

Aluminum wire to be used only where permitted by code i.e., 220 volt locations.