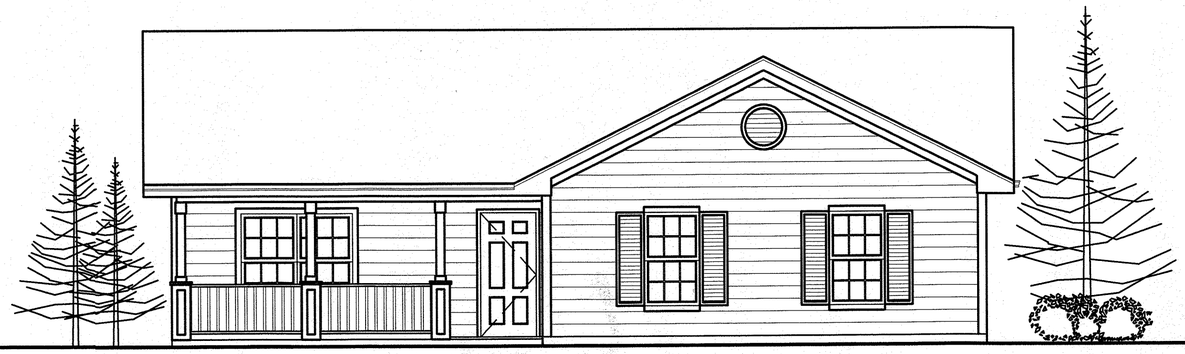


MODEL No. H-2020-S

General Notes

1. It is imperative that the contractor observe manufacturers' instructions and procedures in installing all material and equipment. All instructions and warranties of all materials and equipment to be delivered to the owner at completion of construction.
2. Layout:
   It is recognized that the Contract Documents are diagrammatic in showing certain physical relationships of the various elements and systems and their interfacing with other elements and systems. Establishments and coordination of these relationships is the exclusive responsibility of the Contractor. Do not scale the drawings. Lay out and arrange all elements to carry the harmony of the design throughout the work. In case of conflict or locations not dimensioned, verify required position with Marshall Architecture.
3. This project shall comply with all governing regulations, ordinances, or covenants of the project area in which it is built.
4. Egress windows to have maximum sill height of 44", minimum vertical clear opening of 24", minimum horizontal opening of 20", and have a minimum of 5.7 square feet clear open area.
5. Top of stair handrails to be 34" to 38" above the stair nosing and should be continuous the full length of stair run. Minimum headroom above the stair nosing to be 6'-8". Top of guardrails to be minimum 36" above finished floor. Open rail members to have less than 4" space between. Handrails to be minimum of 1-1/2", maximum of 2" in diameter, spaced a minimum of 1-1/2" from the face of wall.
6. Tempered glazing required at the following locations:
   a. Within 24" arc of a door.
   b. Within 18" of a floor or 60" vertically of a bathtub drain.
   c. Shower enclosures.
   d. Within 36" horizontally of the standing surface of a bathtub or shower.
7. Firestop all pocket doors, flues, and openings at the top of walls.
8. Flash all exterior openings, wood trim members and roof/wall intersections with 26 gauge galvanized flashing material.
9. All exterior doors and doors leading to unheated areas to be weather-stripped with threshold.
10. Vent all exhaust fans to exterior. Provide rain caps with back draft dampers.
11. Exhaust vent for clothes dryer to be installed per Section M1502 IRC 2012 and manufacturers' installation instructions. Exhaust ducts shall not exceed a total combined horizontal and vertical length of 15 feet including two 90-degree elbows. Five feet shall be deducted for each 90 degree elbow in excess of two.
12. Center water closets in space provided (minimum 15" from vertical surfaces at sides).
13. Attic ventilation shall not be less than 1/300th of the attic area as a combination of a rooftop and soffit vents.
14. Garage finish- All surfaces adjacent to habitable space to be insulated and finished with 5/8" type "X" gypsum board. All structural elements supporting structure above to be wrapped with 5/8" type "X" gypsum board. R-30 insulation in floor above. Garage to house door to be 1-3/8" solid core or a door having a fire rating of 20 minutes with spring closer hinges in a weather stripped frame with threshold.
15. Exterior doors should open onto landing located not more than 7 1/2" below the top of the threshold of the door. Minimum length of the landing should not be less than 36".
16. Deck framing members within 18" of exposed ground should be pressure treated or naturally decay resistant wood. Wood located nearer than 6" to the earth or in contact with concrete shall be pressure treated or naturally decay resistant.
17. All exterior walls are to be 2x4's at 16" on center unless otherwise noted. Double top plate single bottom plate. All interior load bearing walls @ 16" O.C. All non bearing to be 24" O.C. U.O.N by engineer

WINDOW TYPES:

SL = HORIZONTAL SLIDER
SH = SINGLE HUNG
FX = FIXED FRAME
FT = FIXED TRANSOM
PS = PATIO SLIDER
(T) = TEMPERED GLASS
(CSMT) = CASEMENT

NOTE:
ALL WINDOWS TO HAVE
U-FACTOR OF .32 OR LESS

NOTE:
ALL EGRESS WINDOWS TO HAVE
A MINIMUM 5.7 S.F. CLEAR OPENING.

WINDOW NOTES:

1. SEE UNIT FLOOR PLANS FOR LOCATION OF ALL WINDOWS - COORDINATE WITH ELEVATIONS.
2. CONTRACTOR TO VERIFY ALL WINDOW TYPES AND SIZES PRIOR TO FABRICATION
3. (T) = TEMPERED GLAZING PER CODE. - CONTRACTOR TO FIELD VERIFY ALL CONDITIONS. SEE GENERAL NOTE #6.
4. U.N.O. - ALL WINDOW HEADS @ 6'-10 1/2" A.F.F.
5. 2660 SH by a window indicates a 2'-6" wide by 6'-0" high window, that is a single hung window.

DOOR TYPES:

SC-1 3/4" SOLID CORE ENTRY DOOR (RE: ELEVATIONS)
- INTERIOR - 1 3/8" HOLLOW CORE, RAISED 6-PANEL, PAINTED
BP - BI-PASS - HOLLOW CORE, RAISED 6-PANEL, PAINTED
SER DR. - 1 3/4" METAL, 20 MINUTE RATED, WITH CLOSER, FLUSH FINISH, PAINTED
OH DR - SECTIONAL STEEL OVERHEAD DOOR, PAINTED
BF - BI-FOLD - HOLLOW CORE, RAISED 6-PANEL, PAINTED
PS - SLIDING GLASS DOOR

NOTE:
ALL OPAQUE DOORS TO HAVE
U-FACTOR OF .21 MAXIMUM

DOOR NOTES:

1. AT DOOR FROM HOUSE TO GARAGE, PROVIDE SELF-CLOSER (DOOR SHALL BE SELF-CLOSING FROM THE 2/3RDS OPEN POSITION)
2. PROVIDE DOOR STOPS AT ALL SWING DOORS
3. PROVIDE FULL PERIMETER WEATHER STRIPPING AT ALL EXTERIOR DOORS
4. CONTRACTOR TO VERIFY ALL DOOR TYPES AND SIZES & COORDINATE HARDWARE REQUIREMENT'S WITH OWNER
5. OPTIONAL DOOR
6. 3068 by a door indicates a 3'-0" wide by 6'-8" high door.

ENERGY CODE:

PERFORMANCED BASED INSPECTION MUST COMPLY WITH CHAPTER 4 OF THE 2018 IECC

DESIGN LOADS:

These plans were designed to meet the external load conditions noted below.

	Dead Loads	Live Loads
Roof, with Composite Shingles	10 psf	30 psf
Floor	10 psf	40 psf
Exterior Decks	12 psf	60 psf
Ceiling (Space above ceilings where limited storage is possible, but additional room construction is not)	10 psf	20 psf
Wind	90 mph/exposure B	
Snow	30 psf ground	
Seismic	B	

FRAMING NOTES:

1. FRAMING LUMBER:
   A. ALL FRAMING LUMBER TO BE HEM-FIR LARCH #2 AND BETTER
      Fb=850/978 psi, Fv=75 psi, Fc=1,250 psi, E=1,300,000 psi
      2x STUDS TO BE HEM-FIR LARCH "STUD" GRADE.
      Fb=675/750 psi, Fv= 75 psi, Fc=800 psi, E=1,200,000 psi
   B. TJI'S AND "MICRO-LAMS" BY TRUS JOIST CORP. OR EQUIV.
      Fb=2,600 psi, Fv=285 psi, Fc=750 psi, E=1,800,000 psi
2. ALL HEADERS TO BE 2-2x12 UNLESS NOTED OTHERWISE ON PLAN.
3. PROVIDE MIN. 2-2x POST UNDER EACH END OF ALL BEAMS AND HEADERS UNLESS NOTED OTHERWISE ON PLAN.
4. PROVIDE SOLID BLOCKING UNDER ALL POSTS 2-2x AND LARGER
5. SHEATH ALL EXTERIOR WALLS WITH 7/16" EXTERIOR GRADE O.S.B. NAIL O.S.B. SHEATHING W/8d NAILS AT 4" O.C. AT EDGES AND 12" O.C. AT INTERMEDIATE MEMBERS.
6. PROVIDE SOLID 2x RIM JOIST AT END OF ALL FLOOR JOISTS WITH DIMENSION LUMBER FLR JOISTS AND "TIMBERSTRAND" RIM JOIST AT ALL "TJI" FLOOR JOISTS U.N.O.
7. ALL METAL CONNECTORS TO BE SIMPSON STRONG TIE OR EQUIVALENT.
8. ALL EXTERIOR WALLS TO BE FRAMED WITH 2x STUDS AT 24" O.C. WITH DOUBLE TOP AND SINGLE BOTTOM PLATE U.N.O.
9. ALL INTERIOR BEARING WALLS TO BE FRAMED WITH 2x STUDS AT 16" O.C. WITH DOUBLE TOP AND SINGLE BOTTOM PLATE U.N.O.
10. GLUE AND NAIL ALL MULTIPLE MEMBERS 2-2x AND LARGER W/16d NAILS AT 6" O.C. FULLY BLOCK WEBS, GLUE AND NAIL ALL MULTIPLE "TJI" FLOOR JOISTS.
11. ROOF SHEATHING TO BE MIN. 5/8" O.S.B. EXTERIOR GRADE SHEATHING AND FLOOR SHEATHING TO BE MIN. 3/4" T&G PLYWOOD GLUED AND NAILED.
12. FRAMER RESPONSIBLE FOR MISSING HEATING AND PLUMBING RUNS.
13. PROVIDE SIMPSON H2.5 OR EQUAL AT ALL TRUSS AND ROOF RAFTER BEARING LOCATIONS.
14. ALL FRAMING TO BE IN CONFORMANCE WITH 2018 EDITION OF INTERNATIONAL RESIDENTIAL CODE.

Drawing Legend

Drawing Notes: (7)
The number "7" refers to plan note 7. for further information regarding the area indicated.

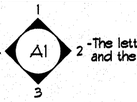
Drawing Reference:
RE: 2 - A2 indicates refer to drawing 2 on sheet A2

Room Titles:
ROOM -room name
9'-0"CPT. -ceiling height/floor covering
CPT = carpet
LINO = sheet linoleum
F.M.C. = Floor Material Change

Section Marker:
shows location and direction of section

Detail Marker:
shows location and direction of detail

Interior Elevation Marker:



-The letters around the outside indicates direction and the letter in the middle - indicates sheet

Sill Plate:
sill plate location

L

Slope:
indicates rise of 7" in 12" horizontal length

Building Codes

2018 IRC 2018 IPC
2018 IECC
2017 NEC
2018 IMC

Sheet Index

SOLAR
PLANS INCLUDE OPTIONAL ACTIVE SOLAR DETAIL

model no. H-2020-S

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checked by: D.L.M.
date: 12-15-06
revised:
sheet index: COVER SHEET
sheet no. A1 of 11

2018 INTERNATIONAL RESIDENTIAL CODE REFERENCE NOTES

LOCATION ON LOT

1 EXTERIOR WALLS LESS THAN 5 FEET FROM A PROPERTY LINE OR ASSUMED PROPERTY LINE SHALL BE OF NOT LESS THAN A ONE-HOUR FIRE-RESISTIVE RATING WITH EXPOSURE FROM BOTH SIDES. (SECTION R302.1)

2 PROJECTIONS BEYOND THE EXTERIOR WALL SHALL COMPLY WITH SECTION R302.1 AND SHALL NOT EXTEND BEYOND:
1. A POINT CLOSER THAN 5 FEET FROM THE LINE USED TO DETERMINE THE FIRE SEPARATION DISTANCE.

3 EXCEPT FOR APPROVED FOUNDATION VENTS, OPENINGS IN EXTERIOR WALLS OF DWELLINGS OR ACCESSORY BUILDINGS LESS THAN 3 FEET FROM A REAL OR AN ASSUMED PROPERTY LINE ARE NOT PERMITTED. (SECTION R302.1)

4 PENETRATIONS OF THE EXTERIOR WALL LOCATED LESS THAN 3 FEET FROM REAL OR AN ASSUMED PROPERTY LINE SHALL BE PROTECTED IN ACCORDANCE WITH SECTION R302.4 (SECTION R302.1)

MINIMUM CEILING HEIGHTS

5 BATHROOMS, TOILET ROOMS, LAUNDRY ROOMS AND BASEMENTS SHALL COMPLY THE MINIMUM CEILING HEIGHT REQUIREMENT FOR HABITABLE ROOMS, HALLWAYS, CORRIDORS, WITH THE SECTION R305.1

LIGHT, VENTILATION AND HEATING

6 ALL HABITABLE ROOMS SHALL HAVE EXTERIOR GLAZING OF NOT LESS THAN 8 PERCENT OF THEIR FLOOR AREA TO PROVIDE NATURAL LIGHT IN ACCORDANCE WITH SECTION R303.1 OR THEY SHALL COMPLY WITH SECTION R303.2 FOR ADJOINING ROOMS:

7 ALL HABITABLE ROOMS SHALL BE PROVIDED WITH 4% NATURAL VENTILATION (OUTDOOR AIR) IN ACCORDANCE WITH SECTION R303.1 OR PROVIDED WITH MECHANICAL VENTILATION IN ACCORDANCE WITH SECTION R303.1, EXCEPTION 1. FOR ADJOINING ROOMS SEE SECTION R303.2.

8 LIGHT AND VENTILATION FOR BATHROOMS, WATER CLOSET COMPARTMENTS AND OTHER SIMILAR ROOMS SHALL COMPLY WITH SECTION R303.3

9 INTERIOR EXTERIOR STAIR ILLUMINATION SHALL COMPLY WITH SECTION R303.7 EXTERIOR STAIR ILLUMINATION SHALL COMPLY WITH SECTION R303.8 REQUIRED GLAZED OPENINGS SHALL COMPLY WITH SECTION R303.9.

10 WHEN WINTER DESIGN TEMPERATURE IS BELOW 60° F (16° C) DWELLING UNITS SHALL BE PROVIDED WITH HEATING FACILITIES WHICH WILL MAINTAIN A TEMPERATURE OF 68° F (20° C) IN COMPLIANCE WITH SECTION R303.10

EMERGENCY ESCAPE AND RESCUE

11 BASEMENTS AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW OR EXTERIOR DOOR CONFORMING TO SECTION R310.1 FOR EMERGENCY ESCAPE OR RESCUE WHICH ARE OPEN TO A PUBLIC WAY.

12 WINDOW WELLS SHALL COMPLY WITH SECTION R310.2.3 TOTAL OF 9 SQ. FT. MIN. WITH A MINIMUM PROJECTION OF 36" A VERTICAL DEPTH GREATER THAN 44" SHALL REQUIRE A LADDER (SECTION R310.2.3.1)

13 BARS, GRILLS, COVERS AND SCREENS PLACE OVER EMERGENCY ESCAPE AND RESCUE OPENINGS, BULKHEAD ENCLOSURES, OR WINDOW WELLS ARE PERMITTED PROVIDED THEY COMPLY WITH SECTION R310.2.1. TO R310.2.3, AND OPENABLE FROM INSIDE WITHOUT THE USE OF KEYS OR TOOLS. (SECTION R310.4)

EXITS, LANDINGS, STAIRWAYS, HANDRAILS, RAMPS AND GUARDS

14 AN EXTERIOR EXIT DOOR THAT DOES NOT PASS THROUGH THE GARAGE IS REQUIRED AND MUST COMPLY WITH THE TYPE AND SIZE REQUIREMENTS OF (SECTION R311.2) 32" WIDE AND 6'-6" HIGH.

15 EGRESS DOORS SHALL BE READILY OPENABLE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. (SECTION R311.2)

16 A FLOOR OR LANDING IS REQUIRED AT EACH SIDE OF AN EXTERIOR DOOR (SECTION R311.3)

17 LANDINGS SHALL BE AT LEAST AS WIDE AS THE DOOR OR STAIRWAY SERVED AND SHALL HAVE A MINIMUM DIMENSION IS THE DIRECTION OF TRAVEL OF 36 INCHES. (SECTION R311.3)

18 STAIRWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 36 INCHES ABOVE THE PERMITTED HANDRAIL HEIGHT. (SECTION R311.7.1)

19 STAIRWAYS SHALL HAVE A MINIMUM WIDTH OF 31.5 INCHES AT AND BELOW THE HANDRAIL WHEN ONLY ONE HANDRAIL IS PROVIDED. (SECTION R311.7.1)

20 HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES ON EITHER SIDE OF THE STAIRWAY. (SECTION R311.7.8.2)

21 TREADS SHALL BE AT LEAST 10 INCHES DEEP, RISERS SHALL NOT BE GREATER THAN 7¾" IN HEIGHT AND THE TREAD OR RISER VARIANCE SHALL NOT EXCEED ⅜" WITHIN ANY FLIGHT OF STAIRS. (SECTIONS R311.7.5.1 & R311.7.5.2)

22 THE PROFILE OF TREADS AND RISERS SHALL CONFORM TO (SECTION R311.7.5.)

23 A LANDING SHALL BE PROVIDED AT THE TOP AND BOTTOM OF STAIRWAYS. (SEE EXCEPTION FOR TOP ON INTERIOR STAIRS). (SECTION R311.7.6)

24 THE FLOOR OR LANDING AT THE EXIT DOOR SHALL NOT BE MORE THAN 1.5" LOWER THAN THE TOP OF THRESHOLD. (SECTION R311.3.1)

25 A MINIMUM HEAD ROOM CLEARANCE FOR STAIRWAYS OF NOT LESS THAN 6 FEET, 8 INCHES SHALL BE PROVIDED. (SECTION R311.7.2)

26 WINDER STAIRS SHALL COMPLY WITH SECTION (R311.7.5.2.1) WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 10" MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AT THE INTERSECTIONS OF THE WALKLINE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 6 INCHES AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIR. WITHIN ANY FLIGHT OF STAIRS, THE LARGEST WINDER TREAD DEPTH AT THE WALKLINE SHALL NOT EXCEED THE SMALLEST WINDER TREAD BY MORE THAN ⅜ INCH.

27 ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL BE PROTECTED ON THE ENCLOSED SIDE WITH ½ INCH GYPSUM BOARD. (SECTION R302.7)

28 HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS. (SECTION R311.7.8)

29 THE TOP OF THE HANDRAILS SHALL BE PLACED NOT LESS THAN 34 INCHES OR MORE THAN 38 INCHES ABOVE THE NOSING OF THE TREADS. (SECTION R311.7.8.1)

30 HANDRAILS ADJACENT TO WALL SHALL HAVE A SPACE OF AT LEAST 1½ INCHES BETWEEN THE WALL AND THE HANDRAIL. (SECTION R311.7.8.3)

31 THE HANDRAILS GRIP SIZE SHALL COMPLY WITH SECTION R311.7.8.5

32 GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS, AND LANDINGS, THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD. (SECTION R312.1.1)

33 REQUIRED GUARDS AT OPEN-SIDED WAQLKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 36 INCHES HIGH MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE, ADJACENT FIXED SEATING OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS. SEE EXCEPTIONS (SECTION R312.1.2)

34 REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT WHICH ALLOW THE PASSAGE OF A SPHERE 4 INCHES IN DIAMETER (SECTION R312.1.3)

GLAZING

35 TYPE AND THICKNESS OF GLASS SHALL BE SPECIFIED IN ACCORDANCE WITH (SECTION R308)

36 INDIVIDUAL GLAZED AREAS, INCLUDING GLASS MIRRORS IN HAZARDOUS LOCATIONS SUCH AS THOSE INDICATED AS DEFINED IN (SECTION R308.4.), SHALL PASS THE TEST REQUIREMENTS OF (SECTION R308.3.1) EXCEPTIONS:
1. LOUVERED WINDOWS AND JALOUSIES SHALL COMPLY WITH (SECTION R308.2).
2. MIRRORS AND OTHER GLASS PANELS MOUNTED OR HUNG ON A SURFACE THAT PROVIDES A CONTINUOUS BACKING SUPPORT.
3. GLASS UNIT MASONARY COMPLYING WITH (SECTION R607).

37 THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING (SECTION R308.4.).
1. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BI-FOLD DOORS.
2. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24 INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE
3. INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE DESCRIBED IN ITEMS 4 AND 5 ABOVE, THAT MEET ALL OF THE FOLLOWING CONDITIONS, MUST MEET ALL REQUIREMENTS TO NEED SAFETY GLAZING:
3.1. EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQUARE FEET
3.2. BOTTOM EDGE LESS THAN 18 INCHES ABOVE FLOOR.
3.3. TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR.
3.4. ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.
4. ALL GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NON-STRUCTURAL INFILL PANELS.
5. GLAZING IN ENCLOSURES FOR OR WALLS FACING HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.
6. GLAZING IN WALLS AND FENCES ADJACENT TO INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS, AND SPAS WHERE THE BOTTOM OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE AND WITHIN 60 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE WATER'S EDGE. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING.
7. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
8. GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60 INCHES HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE NOSE OF THE TREAD.

38 SKYLIGHTS AND SLOPED GLAZING SHALL COMPLY WITH SECTION R308.6

39 EXTERIOR WINDOWS AND GLASS DOORS SHALL CONFORM TO THE PROVISIONS OF SECTION R301.2.1 AND THE FOLLOWING.
EXTERIOR WINDOWS AND DOORS SHALL BE DESIGNED TO RESIST THE DESIGN WIND LOADS SPECIFIED IN TABLE R301.2 (2) AND ADJUSTED FOR HEIGHT AND EXPOSURE PER TABLE R301.2 (3).

40 WINDOWS AND GLASS DOORS SHALL BE ANCHORED IN ACCORDANCE WITH THE PUBLISHED MANUFACTURERS RECOMMENDATIONS. (SECTION R609.1.1)

41 ANCHORAGE OF EXTERIOR WINDOWS SHALL CONFORM TO (SECTION R609.1.2)

42 MULLIONS OCCURRING BETWEEN INDIVIDUAL WINDOW AND GLASS DOOR ASSEMBLIES SHALL COMPLY WITH (SECTION R609.8)

SMOKE ALARMS

43 SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS (SECTION R314.3)
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS BUT NOT INCLUDING CRAWL SPACE AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

44 SMOKE ALARMS SHALL BE INTERCONNECTED AS INDICATED IN SECTION R314.4

45 THE POWER SOURCE FOR SMOKE ALARMS SHALL COMPLY WITH SECTION R314.6

SANITATION,TOILET, BATH AND SHOWER SPACES.

46 TOILET, BATH AND SHOWER FIXTURES SHALL BE SPACED AS PER FIGURE R307.1 (SECTION R307.1)

GARAGES AND CARPORTS

47 OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. (SECTION R302.5.1)

48 OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1⅜ INCHES IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS 1⅜ INCHES THICK OR 20 MINUTE FIRE-RATED DOOR (SECTION R302.5.1)

49 THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. THIS PROVISION DOES NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL. (SECTION R302.6)

50 DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL. SUCH DUCTS SHALL HAVE NO OPENING TO THE GARAGE. (SECTION R302.5.2)

51 GARAGE FLOOR SURFACES SHALL BE OF AN APPROVED NON-COMBUSTABLE MATERIAL AND THE AREA USED TO PARK VEHICLES SHALL BE SLOPED TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY. (SECTION R309.1)

INSULATION

52 INSULATION MATERIALS SHALL COMPLY WITH THE PROVISIONS OF (SECTION R302.1(1)) & GIVEN COMPLIANCE SUBMITTAL VALUES USED IN ENERGY CODE.

53 COMBUSTIBLE INSULATION SHALL BE SEPARATED A MINIMUM OF THREE INCHES FROM RECESSED LIGHTING FIXTURES, FAN MOTORS AND OTHER HEAT-PRODUCING DEVICES (SEE EXCEPTION) (SECTION R302.14.)

PROTECTION AGAINST SUBTERRANEAN TERMITES

54 1. PROTECTION SHALL BE BY CHEMICAL SOIL TREATMENT, PRESSURE PRESERVATIVELY TREATED WOOD, NATURALLY TERMITE-RESISTANT WOOD OR PHYSICAL BARRIERS (SUCH AS METAL OR PLASTIC TERMITE SHEILDS), OR ANY COMBINATION OF THESE METHODS. (SECTION R318.1)
2. THE CONCENTRATION, RATE OF APPLICATION AND METHOD OF TREATMENT OF THE CHEMICAL TERMITICIDE SHALL BE IN STRICT ACCORDANCE WITH THE TERMITICIDE LABEL. (SECTION 318.2)
3. FIELD CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESSURE PRESERVATIVELY TREATED WOOD SHALL BE RETREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4 (SECTION 318.2)

PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY

55 THE FOLLOWING LOCATIONS SUBJECT TO DECAY DAMAGE COMPLYING WITH (SECTION R317.1)
1. WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR CLOSER THAN 18 INCHES OR WOOD GIRDERS WHEN CLOSURE THAN 12 INCHES TO BE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREA LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
2. ALL WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM THE
3. SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER
4. THE ENDS OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN Ø.5 INCHES ON TOPS, SIDES AND ENDS.
5. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND.
6. WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM SUCH FLOORS OR ROOFS BY AN IMPERVIOUS MOISTURE BARRIER
7. WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY WALLS OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING STRIPS OR FRAMING MEMBERS.

56 WOOD STRUCTURAL MEMBERS INCLUDING SUPPORTS FOR BUILDINGS, BALCONIES, PORCHES OR SIMILAR PERMANENT BUILDING APPERTUANCES SUBJECT TO WEATHER WITHOUT ADEQUATE PROTECTION SHALL COMPLY WITH (SECTION R317.1.3) WHEN REQUIRED BY THE BUILDING OFFICIAL.

ROOF VENTILATION AND ATTIC ACCESS

57 ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES COVERED WITH CEILING MEMBRANE SHALL BE VENTILATED IN ACCORDANCE WITH SECTION R806.1

58 ATTIC ACCESS SHALL BE PROVIDED FOR BUILDINGS WITH COMBUSTIBLE CEILINGS OR ROOF CONSTRUCTION. (SECTION R807.1)

WALL COVERINGS CEILING /INTERIOR WALL COVERING

59 GYPSUM BOARD SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R702.3 AND TABLE R702.3.5.

60 CERAMIC TILE SURFACES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R702.4.

61 FIBER-CEMENT, FIBER-MAT REINFORCED CEMENT, GLASS MAT GYPSUM BACKERS OR FIBER-REINFORCED GYPSUM BACKERS IN COMPLIANCE WITH ASTM C 1288, C 1325, C 1178 OR C 1278, RESPECTIVELY, AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS (SECTION R702.4.2)

62 WALL AND CEILING FINISHES SHALL HAVE A FLAME-SPREAD CLASSIFICATION OF NOT GREATER THAN 200 (R302.9.1) AND A SMOKE-DEVELOPED INDEX OF NOT GREATER THAN 450. (SECTION R302.9.2)

EXTERIOR WALL COVERINGS

63 WEATHER EXPOSED SURFACES SHALL BE PROVIDED WITH A WEATHER-RESISTIVE BARRIER (BUILDING FELT OR APPROVED MATERIAL) IN ACCORDANCE WITH SECTION R703.2

64 WOOD, HARDBOARD AND WOOD STRUCTURAL PANEL SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.5

65 EXTERIOR WALL COVERING SHALL HAVE THE MINIMUM THICKNESS AND BE ATTACHED IN ACCORDANCE WITH TABLE R703.1. (SECTION R703.5.)

66 WOOD SHAKES AND SHINGLES USED AS AN EXTERIOR WALL COVERING SHALL BE INSTALLED IN ACCORDANCE WITH (SECTION R703.6)

67 EXTERIOR STONE AND MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH (SECTION R703.8)

68 MASONRY VENEER ABOVE OPENING SHALL BE SUPPORTED WITH LINTELS OF NON-COMBUSTABLE MATERIALS. (SECTION R703.8.3)

69 MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL WITH CORROSION-RESISTANT METAL TIES IN ACCORDANCE WITH SECTION R703.8.4. WITH AIR SPACE OR MORTAR FILL PER SECTION R703.8.4.2

70 MASONRY VENEER SHALL BE PROVIDED WITH FLASHING IN ACCORDANCE WITH SECTION R703.8.5

71 WEEP HOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS IN ACCORDANCE WITH SECTION R703.8.6

72 EXTERIOR INSULATION FINISH SYSTEMS (EIFS) SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.9.

73 EXTERIOR WALLS SHALL BE PROVIDED WITH FLASHING TO PREVENT THE ENTRY OF WATER INTO THE WALL CAVITY. (SECTION R703.4)

CHIMNEYS AND FIREPLACES FACTORY-BUILT FIREPLACES

74 FACTORY BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127 (SECTION R1004.1)

75 HEARTH EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE FACTORY-BUILT FIREPLACE LISTING AND BE READILY DISTINGUISHABLE FROM THE SURROUNDING FLOOR AREA. (SECTION R1004.2)

EXTERIOR AIR SUPPLY

76 CHIMNEYS FOR USE WITH FACTORY-BUILT FIREPLACES SHALL COMPLY WITH THE REQUIREMENT OF UL 127. (SECTION R1005.4)

ROOF COVERINGS AND MATERIALS ROOF CLASSIFICATION

77 ROOF COVERINGS SHALL BE COVERED WITH MATERIALS AS SET FORTH IN SECTION R904 AND R905. (SECTION R902.1)

78 ROOF COVERINGS SHALL BE CLASS A, B, OR C. (SECTION R902.1)

WEATHER PROTECTION

79 ROOF DECKS SHALL BE COVERED WITH APPROVED ROOF COVERINGS. (SECTION R903.1)

80 FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF R903.2.

81 WHERE ROOF DRAINS ARE REQUIRED, OVERFLOW DRAINS HAVING THE SAME SIZE AS THE ROOF DRAINS SHALL BE INSTALLED WITH THE INLET FLOW LINE LOCATED 2 INCHES ABOVE THE LOW POINT OF THE ROOF OR OVERFLOW SCUPPERS THREE TIMES THE SIZE OF THE ROOF DRAINS AND HAVING MINIMUM OPENING HEIGHT OF 4 INCHES SHALL BE INSTALLED IN THE ADJACENT PARAPET WALLS WITH THE INLET FLOW LOCATED 2 INCHES ABOVE THE LOW POINT OF THE ROOF SERVED. THE INSTALLATION AND SIZING OF OVERFLOW DRAINS, LEADERS AND CONDUCTORS SHALL COMPLY WITH THE INTERNATIONAL PLUMBING CODE (SECTION 903.4.1).

MATERIALS

82 ROOF ASSEMBLIES SHALL BE APPLIED IN ACCORDANCE WITH CHAPTER 9 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. (SECTION 904.1)

83 ROOF COVERINGS SHALL BE DELIVERED IN PACKAGES BEARING THE MANUFACTURER'S IDENTIFYING MARKS AND APPROVED TESTING AGENCY LABELS WHEN REQUIRED. (SECTION 904.4)

REQUIREMENTS FOR ROOF REQUIREMENTS

84 ASPHALT SHINGLES SHALL BE INSTALLED IN ACCORDANCE WITH (SECTION R905.1) HIGH WIND SPECIFICATIONS PER (SECTION R905.2.4.1)

85 ICE BARRIER SHALL BE PROVIDED IN AREAS WHERE THERE HAS BEEN A HISTORY OF ICE FORMING ALONG THE EAVES. (SECTION R905.1.2)

86 UNDERLAYMENT APPLIED IN AREAS SUBJECT TO HIGH WINDS (GREATER THAN 110 MPH PER FIGURE R301.2(5)) SHALL BE APPLIED WITH SECTION R905.1.1. (SECTION R905.2.3)

87 FLASHING FOR ASPHALT SHINGLES SHALL COMPLY WITH SECTION R905.2.8

FOUNDATION - WOOD

88 ALL LUMBER AND PLYWOOD SHALL BE PRESSURE-PRESERVATIVE TREATED AND DRIED AFTER TREATMENT IN ACCORDANCE WITH AWPA U1 (SECTION R402.1.2)

89 FASTENERS USED BELOW GRADE (OR USED IN KNEE WALL CONSTRUCTION) SHALL BE OF TYPE 304 OR 316 STAINLESS STEEL, SILICON BRONZE, COPPER, HOT-DIPPED GALVANIZED (ZINC COATED) STEEL NAILS, OR UNITS SHALL BE PROVIDED WITH HEATING FACILITIES WHICH WILL MAINTAIN A HOT-TUMBLED GALVANIZED (ZINC COATED) STEEL NAILS. (SECTION R402.1.1)

FOUNDATION WATERPROOFING AND DAMP-PROOFING CONCRETE AND MASONRY FOUNDATIONS

90 IN AREAS WHERE HIGH WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS ARE KNOWN TO EXIST, EXTERIOR FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACE BELOW GRADE SHALL BE WATERPROOFED AS PER (SECTION R406.2)

91 FOUNDATION WALL WATER PROOFING SHALL BE WITH A MEMBRANE EXTENDING FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE, WITH MATERIALS AS SPECIFIED IN SECTION R406.2. EXCEPT WHERE REQUIRED TO BE WATERPROOFED, FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACES LOCATED BELOW GRADE SHALL BE DAMPPROOFED. (SECTION R406.1)

92 DAMP PROOFING, WHERE REQUIRED, SHALL BE INSTALLED WITH MATERIALS AND AS REQUIRED IN SECTION R406.1

COLUMNS

93 WOOD COLUMNS SHALL BE PROTECTED AGAINST DECAY AS SET FORTH IN SECTION R317 (SECTION R407.1)

94 ALL INSIDE AND OUTSIDE SURFACES OF STEEL COLUMNS SHALL BE GIVEN A SHOP COAT OF RUST-INHIBITIVE PAINT, OR STEEL SHALL BE OF CORROSION-RESISTANT TYPE OR TREATED WITH COATING TO PROVIDE CORROSION RESISTANCE. (SECTION R407.2)

UNDER FLOOR SPACE

95 VENTILATION OPENINGS IN UNDER-FLOOR SPACES SPECIFIED IN SECTIONS R408.1 & R408.2 SHALL NOT BE REQUIRED WHERE:
1. EXPOSED EARTH IS COVERED WITH A CONTINUOUS VAPOR RETARDER JOINTS OF THE VAPOR RETARDER SHALL OVERLAP BY 6 INCHES AND SHALL BE SEALED OR TAPED. THE EDGES OF THE VAPOR RETARDER SHALL EXTEND AT LEAST 6 INCHES UP THE STEM WALL & SHALL BE ATTACHED AND SEALED TO THE STEM WALL (SECTION 408.3)
2. ONE OF THE FOLLOWING IS PROVIDED FOR THE UNDER-FLOOR SPACE (SECTION 408.3).
2.1 CONTINUOUSLY OPERATED MECHANICAL EXHAUST VENTILATION AT A RATE EQUAL TO 1 CFM FOR EACH 50 SQ. FT. OF CRAWL SPACE FLOOR AREA, INCLUDING AN AIR PATHWAY TO THE COMMON AREA AND PERIMETER WALLS INSULATED IN ACCORDANCE WITH SECTION N1102.2.11
2.2 CONDITIONED AIR SUPPLY SIZED TO DELIVER AT A RATE EQUAL TO 1 CFM FOR EACH 50 SQ. FT. OF UNDER-FLOOR AREA, INCLUDING A RETURN AIR PATHWAY TO THE COMMON AREA, AND PERIMETER WALLS INSULATED IN ACCORDANCE WITH SECTION N1102.2.11
2.3 PLENUM COMPLYING WITH SECTION M1601.5, IF UNDER-FLOOR SPACE IS USED AS A PLENUM

96 AN ACCESS OPENING IS INCHES BY 24 INCHES SHALL BE PROVIDED TO THE UNDER FLOOR SPACE. (SECTION R408.4)

97 ACCESS OPENINGS TO UNDER FLOOR SPACES WHERE MECHANICAL EQUIPMENT IS LOCATED SHALL BE PROVIDED IN ACCORDANCE WITH SECTION M1305.1.4. (SECTION R408.4)

98 FINISHED GRADE FOR UNDER FLOOR SPACES SHALL COMPLY WITH SECTION R408.6

FIRE PROTECTION - FIRE BLOCK - DRAFT STOP

99 PROVIDE FIRE PROTECTION OF FLOORS PER SECTION R302.13

100 PROVIDE FIRE BLOCKING PER SECTION R602.8

101 PROVIDE DRAFT STOP PER SECTION R502.12

COMBUSTION AIR

102 PER CHAPTER 24 SECTION G2407

ELECTRICAL

103 PER CHAPTER 34-43 IRC (INTERNATIONAL RESIDENTIAL CODE)

CARBON MONOXIDE ALARMS

104 FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES (SECTION R315.1)

AUTOMATIC FIRE SPRINKLER SYSTEMS

105 AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ONE- AND TWO- FAMILY DWELLINGS. (SECTION R313.2)
AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION P2904 OR NFPA 13D. (SECTION R313.2.1)

EXTERIOR

106 APPROVED ADDRESS NUMBERS ARE TO BE PROVIDED IN A POSITION TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. (SECTION R319.1)

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checked by: D.L.M.

date: 12-15-06

revised:

sheet index: IRC 2018 NOTES

sheet no. A2 of 11

ARCHITECTURAL LEGEND

1. Provide 22"x30" attic access.
2. 24" towel bar.
3. Towel ring.
4. Soap and grab bar.
5. Recessed medicine cabinet.
6. Mirror.
7. 36"x36" shower receptor w/ tempered glass enclosure.
8. Provide 18"x24" c.s. access
9. One shelf and one rod.
10. One shelf and two rods 42" high and 40" between.
11. Linen closet - 5 shelves.
12. 34" high (min.) 38" high (max.) 11½" @ handrail.
13. 34" high (min.) 38" high (max.) 600 type grabrail w/ 2x2 balusters @ 4" o.c.
14. 36" high guardrail w/ 2x2 balusters @ 6" O.C.
15. Hose bibb.
16. 2x6 stud wall
17. Maximum vertical height measured from top of threshold of door to landing not to exceed 7½". Maximum threshold height at door to interior landing not to exceed 1".
18. Door between house and garage to be 1⅜" minimum. Changes in elevations at doors due to landings or termination of stairs, to be measured from top of door threshold.
19. Provide water-resistive type gyp. bd. @ bath walls at tub & shower locations.

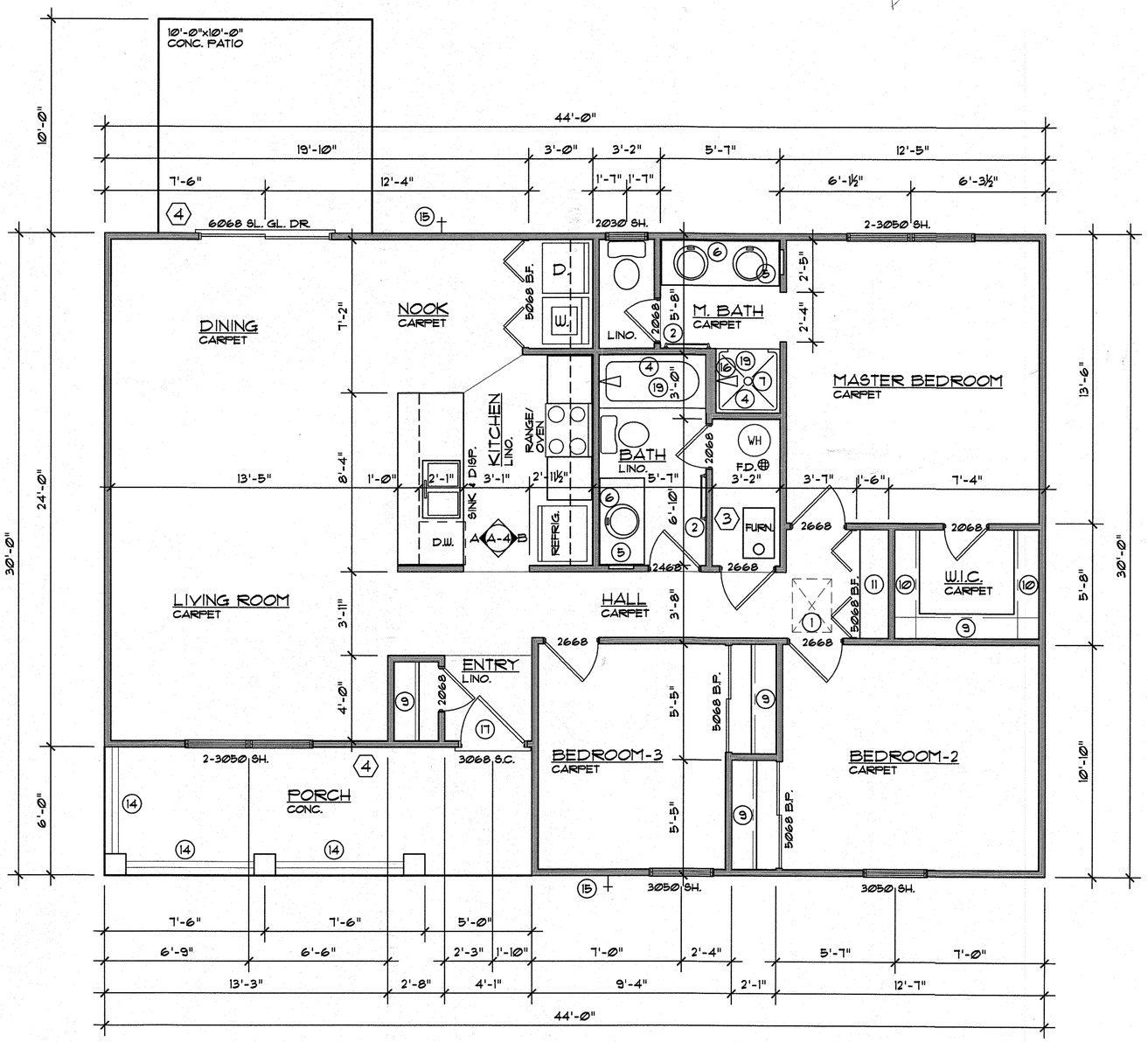
GENERAL NOTES

1. Provide ⅝" Type "X" 1-hour fire rated drywall @ garage walls, ceilings and structural members adjacent to living areas as per section 302.2 of the IRC. (drywall to extend to the underside of the highest roof sheathing or be installed to entire ceiling.)
2. Start top of 4" concrete garage slab, 2" below top of garage foundation wall @ rear and slope 4" down to front foundation wall over blockout (2" min. req. by code).
3. Provide 1" minimum clearance around furnace flue.
4. Install an impervious membrane between all concrete patios/porches and wood frame as per code.

Do not scale drawings, use dimensions as specified on drawings.

NOTE: FOR BEAM SIZES AND FRAMING NOTES, REFER TO STRUCTURAL SHEETS.

25 pcs 15 Base Casing



1 MAIN LEVEL FLOOR PLAN

1/4" = 1'-0" 1,200 Sq. Ft.

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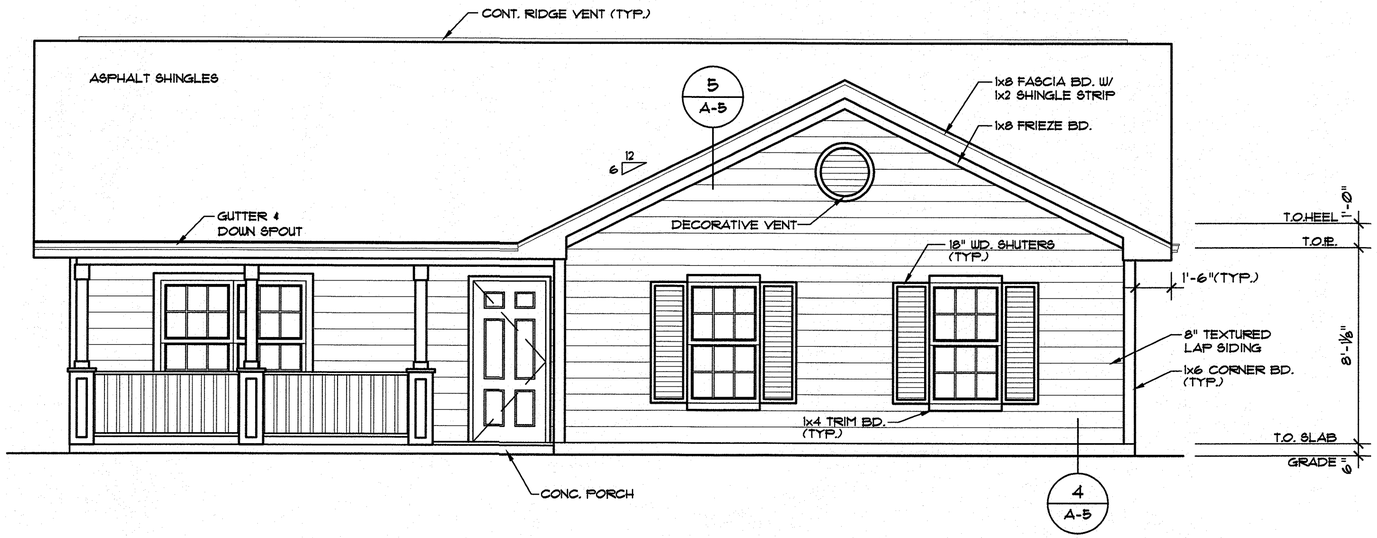
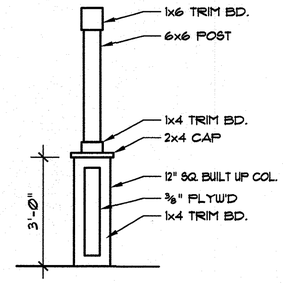
sheet index: FLOOR PLAN
sheet no. A3 of 11



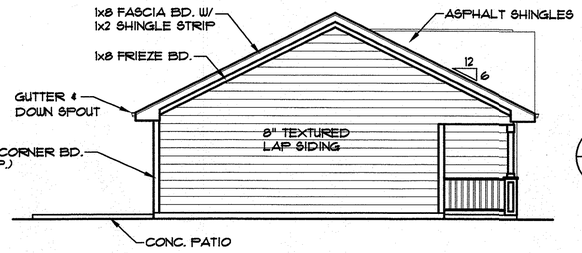
1 FRONT ELEVATION
1/4" = 1'-0"

TILT AND ORIENTATION OF SOLAR PANELS

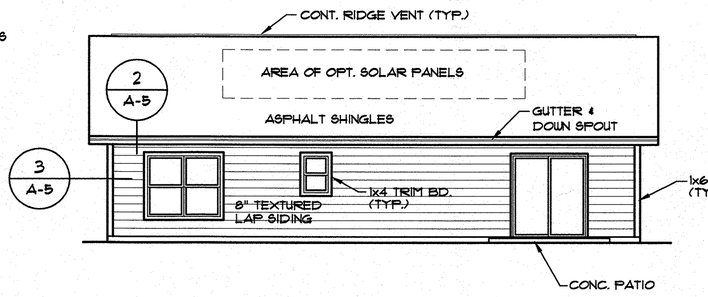
Solar panels should be placed as close as possible on a south facing roof in the Northern Hemisphere. The angle of degree varies as per location.



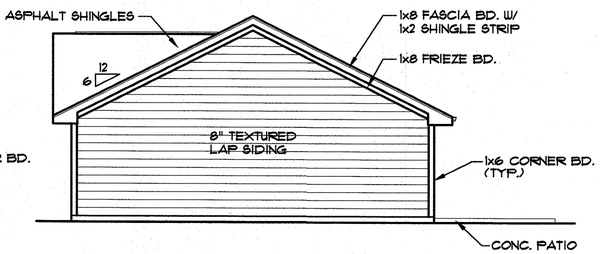
2 COLUMN DETAIL
3/8" = 1'-0"



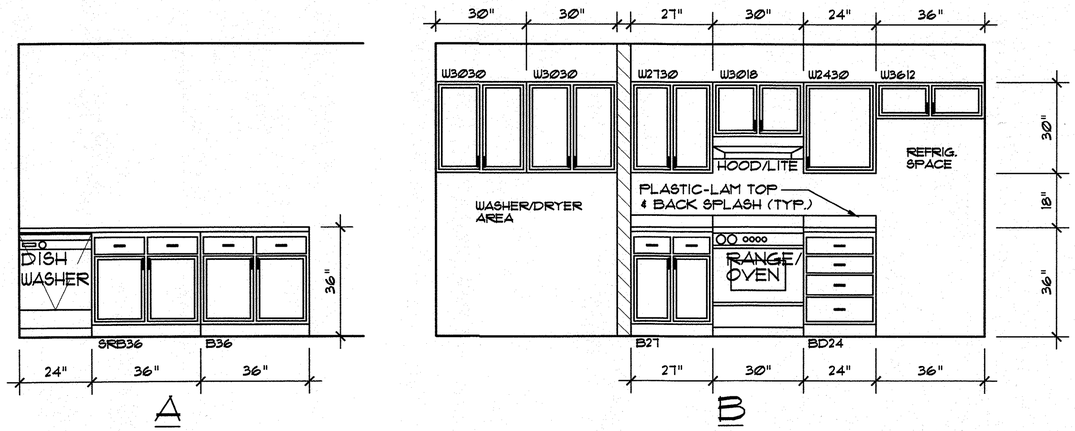
3 LEFT SIDE ELEVATION
1/8" = 1'-0"



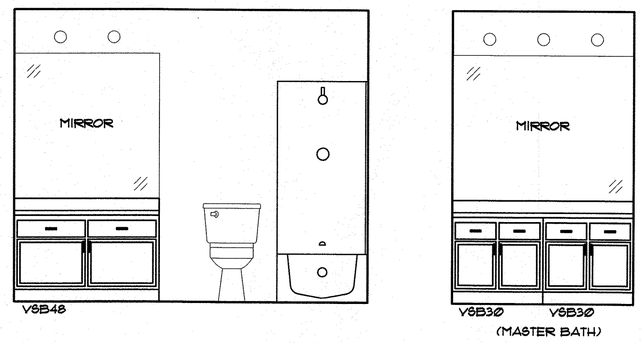
4 REAR ELEVATION
1/8" = 1'-0"



5 RIGHT SIDE ELEVATION
1/8" = 1'-0"



6 KITCHEN/ LAUNDRY CABINET ELEVATIONS
3/8" = 1'-0"



7 BATH ELEVATIONS
3/8" = 1'-0"

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sheet index: ELEVATIONS
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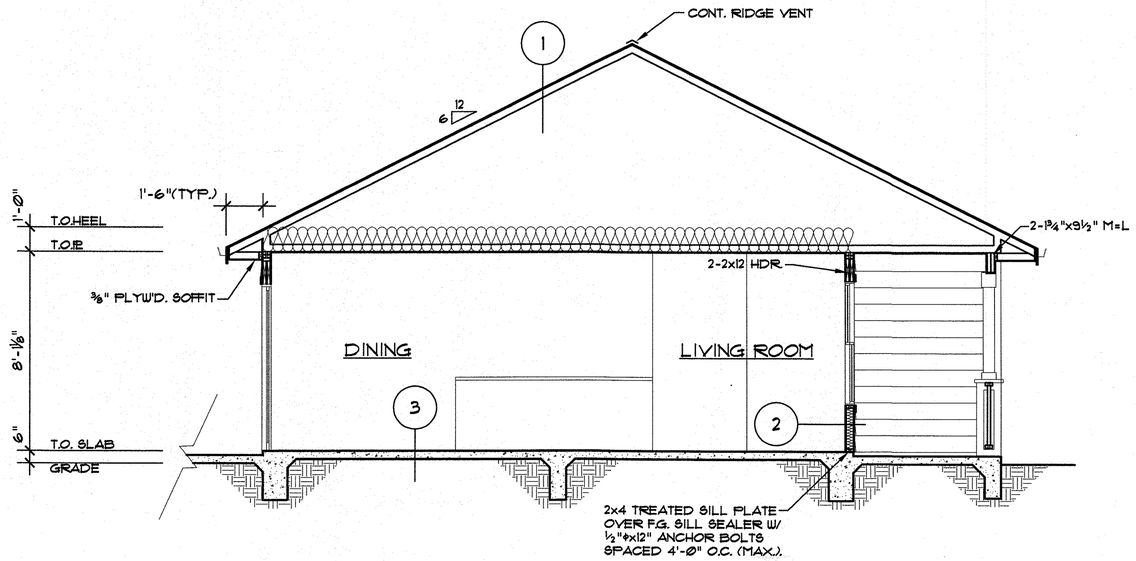
(1) **ROOF SYSTEM:**
240 # ASPHALT SHINGLES ON 15 # FELT UNDERLAYMENT ON 5/8" EXTERIOR GRADE O.S.B. SHEATHING NAILED OVER PRE-MANUFACTURED ROOF TRUSSES @ 24" O.C. OR 2x RAFTERS (SEE ROOF FRAMING) W/R-38 FIBER-GLASS INSULATION AND ½" GYP. BD. TO INTERIOR.

(2) **EXTERIOR WALL SYSTEM:**
8" TEXTURED LAP SIDING OVER WEATHER-RESISTANT SHEATHING PAPER (PER SECT. R703.2 2018 IRC) APPLIED OVER 7/16" EXT. GRADE O.S.B. SHEATHING ON 2x4 STUDS @ 16" O.C. W/DBL. TOP & SINGLE BOT. PLATE W/R-15 BATT INSULATION & ½" GYP. BD. TO INTERIOR.

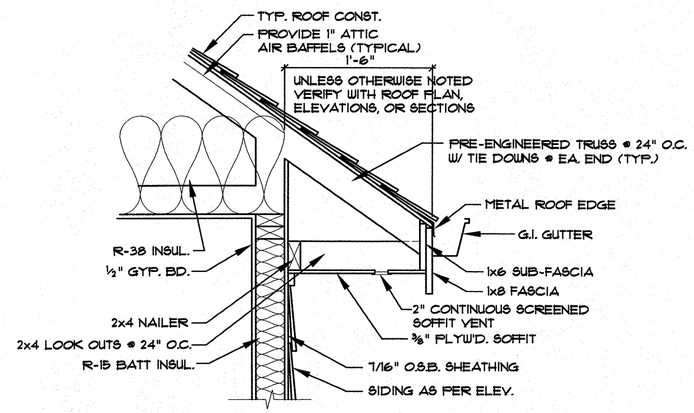
(3) **FLOOR SYSTEM:**
4" CONC. SLAB W/6x6-10/10 W.W.M. OVER 10 MIL. POLY. VAPOR BARRIER AND 4" GRAVEL.

NOTE:
CONC. TO ACHIEVE 3000 PSI COMP. STRENGTH MINIMUM IN 28 DAYS.

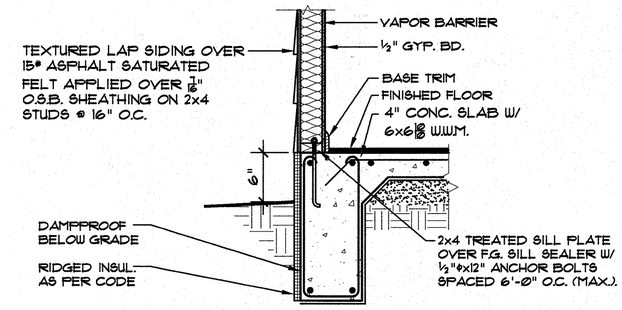
NOTE: INSTALL RIDGED INSUL. TO CONC. SLAB AS REQUIRED BY BY IECC 2018 CLIMATE ZONE.



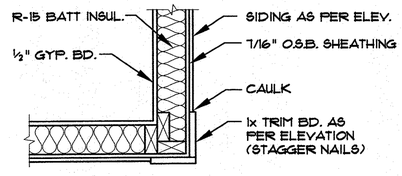
1 CROSS SECTION
1/4" = 1'-0"



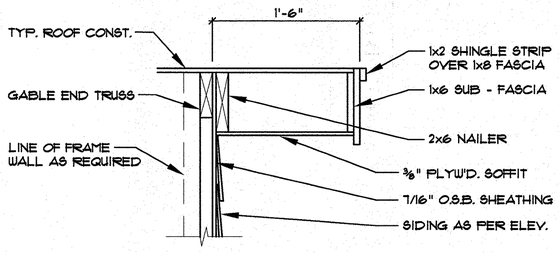
2 CORNICE DETAIL
1" = 1'-0"



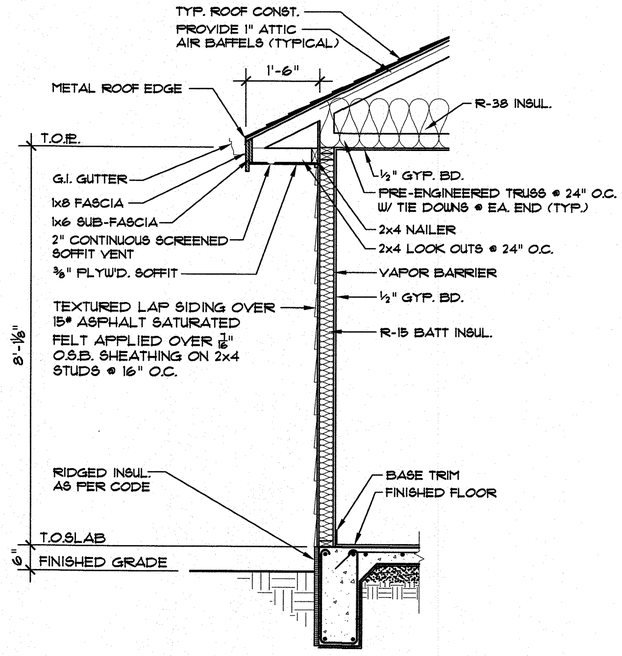
4 EXTERIOR WALL DETAIL
3/4" = 1'-0"



3 CORNER DETAIL
1" = 1'-0"



5 GABLE DETAIL
1" = 1'-0"



6 TYPICAL WALL SECTION
1/2" = 1'-0"

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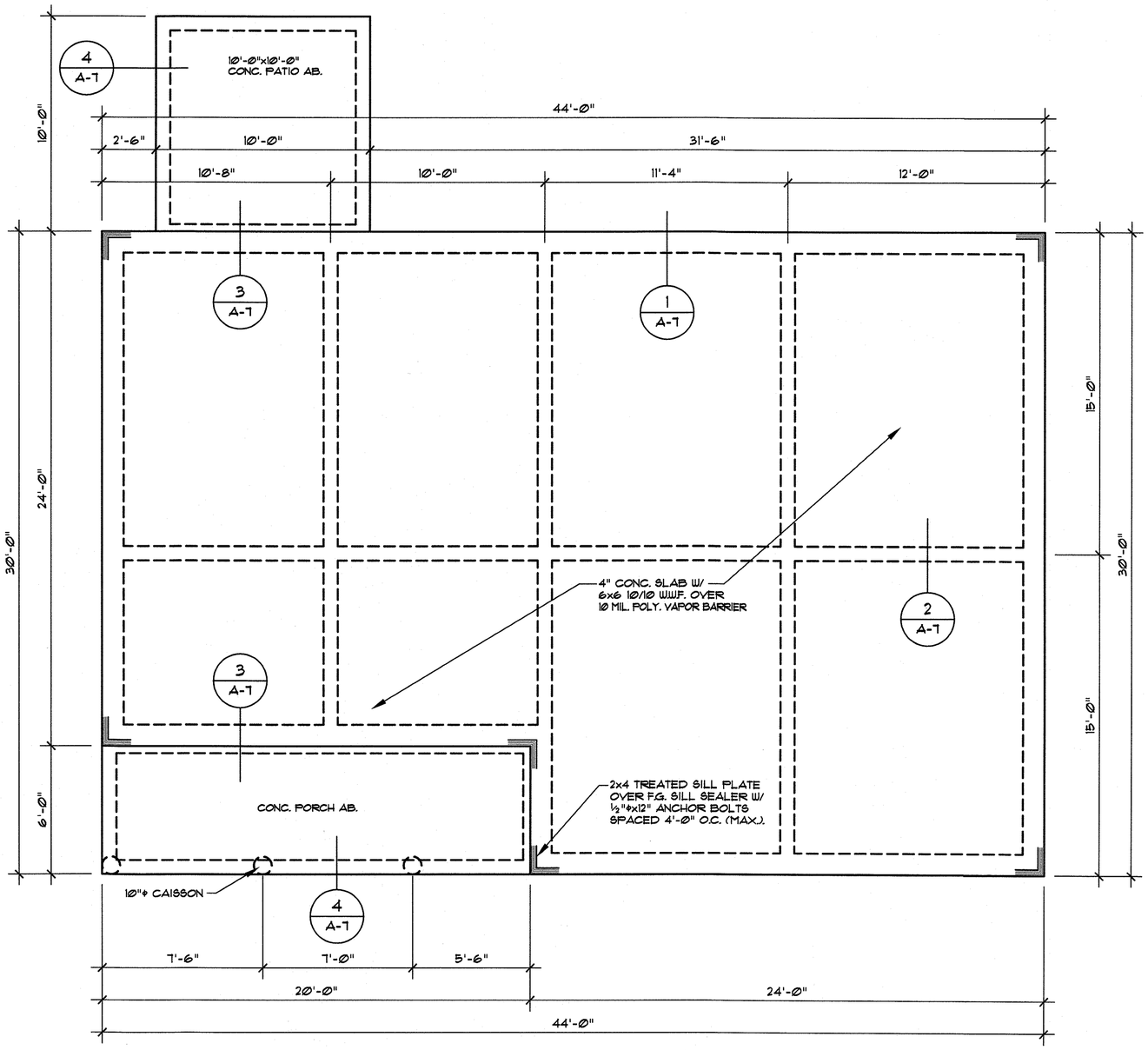
revised:
sheet index: SECTIONS
sheet no. A5 of 11

NOTE: Foundation design shown on these drawings are conceptual only. Actual foundation design by others. Foundation design to be based upon site soil conditions and building code requirements.

NOTE:
CONC. TO ACHIEVE 3000 PSI COMP. STRENGTH MINIMUM IN 28 DAYS.

NOTE: INSTALL RIDGED INSUL. TO CONC. SLAB AS REQUIRED BY BY IECC 2018 CLIMATE ZONE.



1 CONC. SLAB FLOOR PLAN
1/4" = 1'-0"

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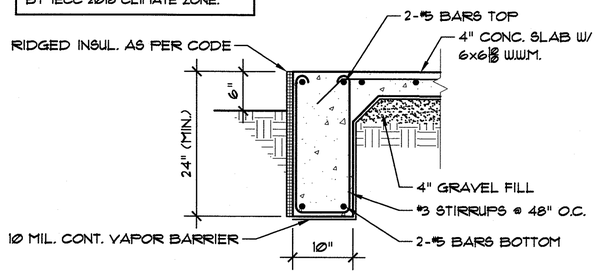
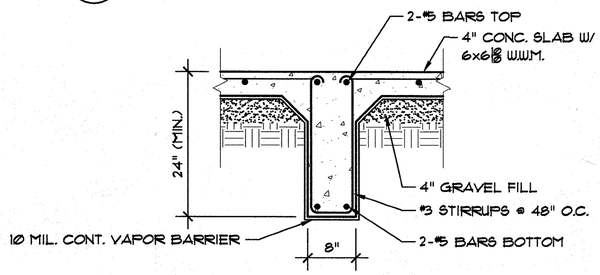
sheet index: CONC. SLAB FLOOR PLAN
sheet no. A6 of 11

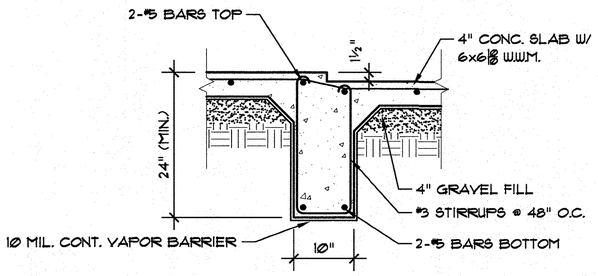
NOTE: INSTALL RIDGED INSUL. TO CONC. SLAB AS REQUIRED BY BY IECC 2018 CLIMATE ZONE.



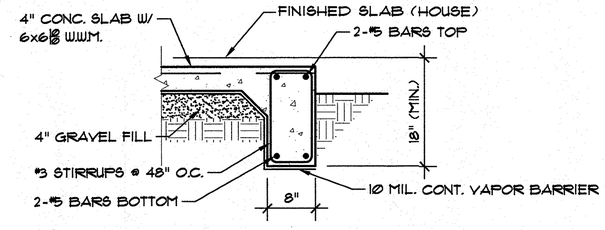
1 PERIMETER BEAM DETAIL
3/4" = 1'-0"



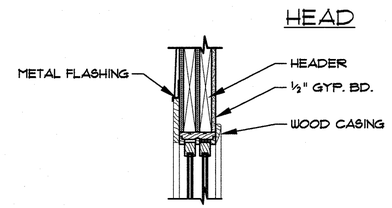
2 INTERIOR BEAM DETAIL
3/4" = 1'-0"



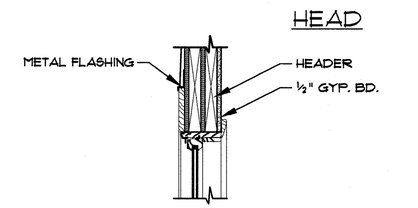
3 HOUSE/PATIO BEAM DETAIL
3/4" = 1'-0"



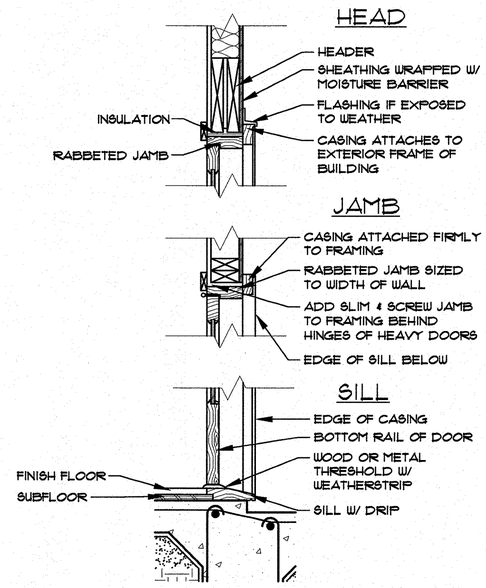
4 PATIO BEAM DETAIL
3/4" = 1'-0"



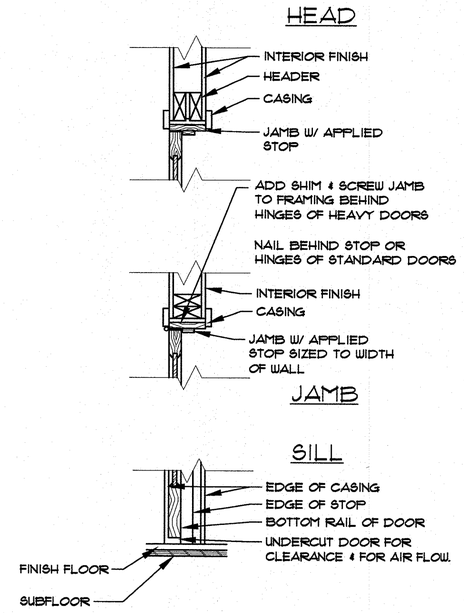
5 SL. WINDOW DETAIL
1" = 1'-0"



6 SH. WINDOW DETAIL
1" = 1'-0"



7 EXTERIOR DOOR DETAIL
1" = 1'-0"



8 INTERIOR DOOR DETAIL
1" = 1'-0"

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sheet index: DETAILS
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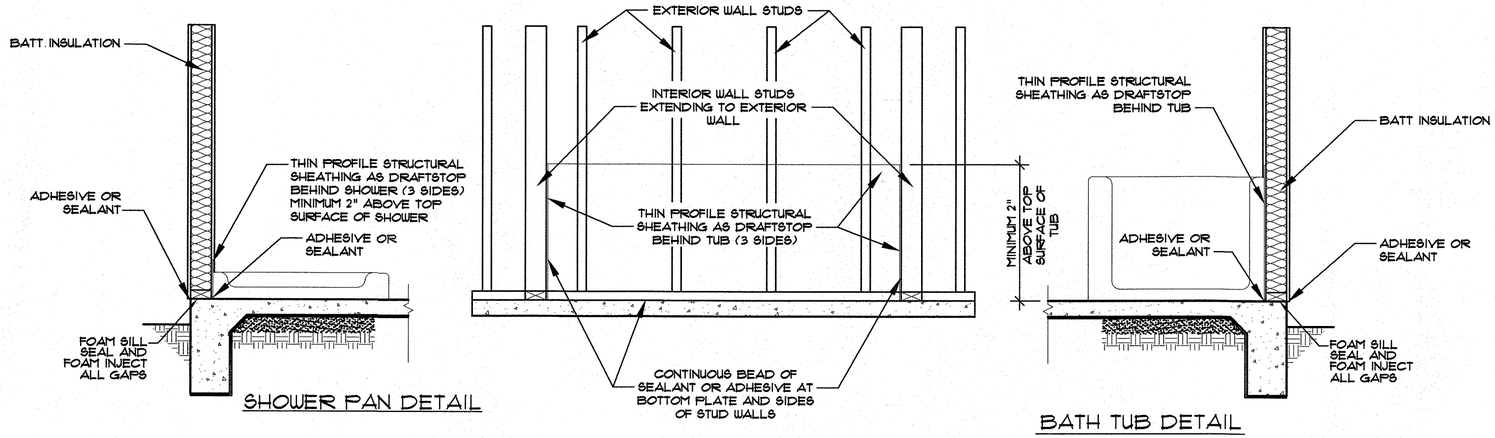
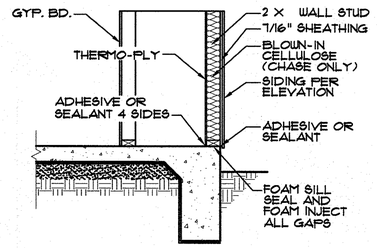
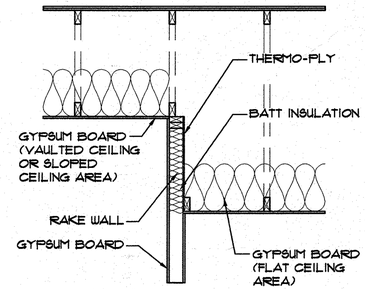


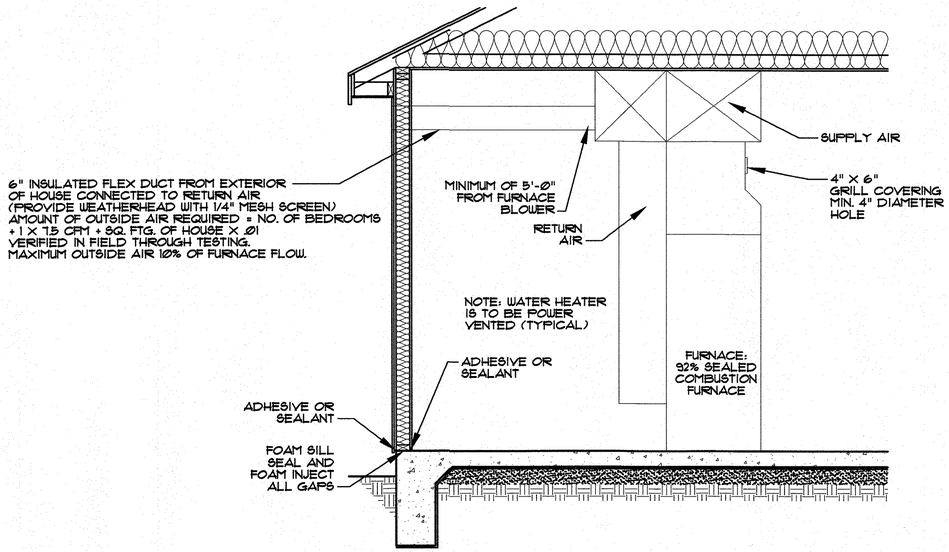
1 PANELIZED WALL DETAIL
¾" = 1'-0"



2 FIRST FLOOR DETAIL
½" = 1'-0"



3 RAKE WALL DETAIL
½" = 1'-0"



4 FURNACE DETAIL
½" = 1'-0"

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sheet index: AIR BARRIER DETAILS
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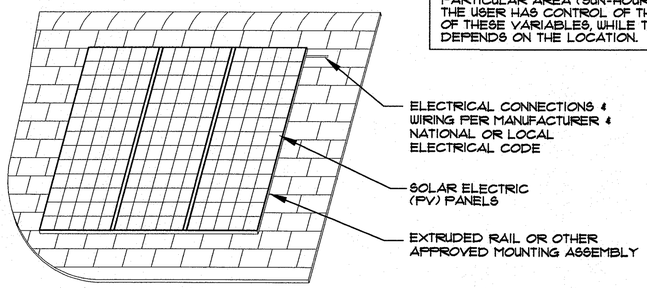
NOTE: SOLAR ELECTRIC (PV) ROOFING PANELS SHALL BE UL LISTED AND INSTALLED PER MANUFACTURER INSTALLATION INSTRUCTIONS AND COMPLY WITH THE NATIONAL ELECTRIC CODE AND LOCAL UTILITY REQUIREMENTS.

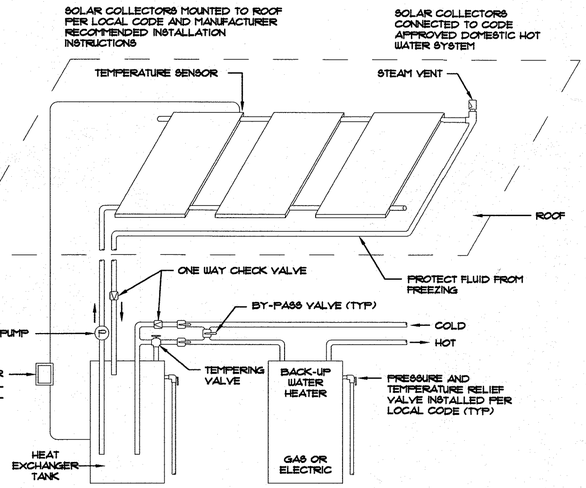
SYSTEM SIZING INFORMATION

THE SIZE OF A SOLAR ELECTRIC SYSTEM DEPENDS ON THE AMOUNT OF POWER THAT IS REQUIRED (WATTS), THE AMOUNT OF TIME IT IS USED (HOURS) AND THE AMOUNT OF ENERGY AVAILABLE FROM THE SUN IN A PARTICULAR AREA (SUN-HOURS PER DAY). THE USER HAS CONTROL OF THE FIRST TWO OF THESE VARIABLES, WHILE THE THIRD DEPENDS ON THE LOCATION.



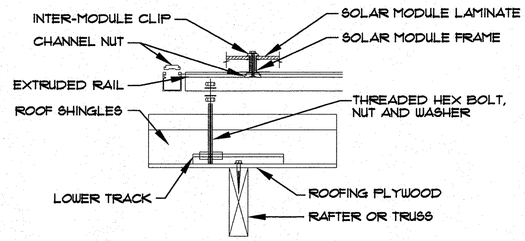
1 PHOTOVOLTAIC PANEL ISOMETRIC

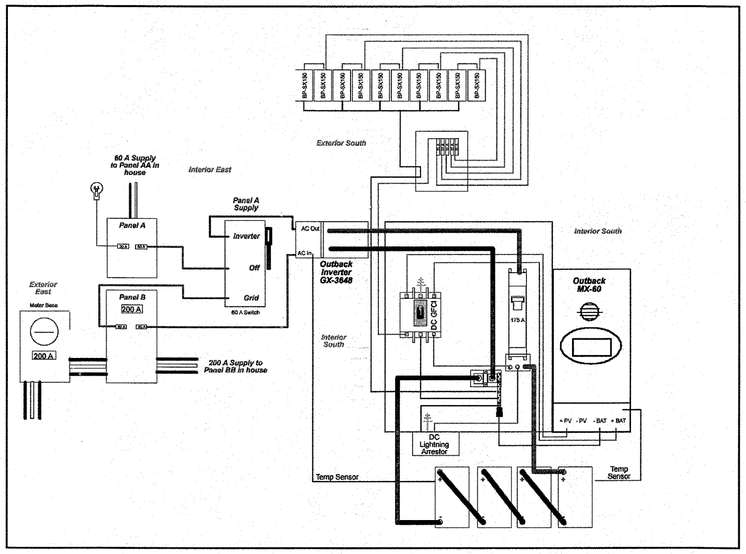
N.T.S.



2 PHOTOVOLTAIC PANEL CONNECTION

1½" = 1'-Ø"





3 SOLAR DOMESTIC WATER HEATER

N.T.S.

4 SOLAR ELECTRIC SCHEMATIC DIAGRAM

N.T.S.

SOLAR INSOLATION CHART

STATE	CITY	SUN HRS. PER DAY HIGH	LOW	AVG.
AK	FAIRBANKS	5.87	2.12	3.99
AL	MONTGOMERY	4.69	3.37	4.23
AR	LITTLE ROCK	5.29	3.88	4.69
AZ	PHOENIX	7.13	5.78	6.58
CA	LOS ANGELES	6.14	5.03	5.62
CA	SODA SPRINGS	6.47	4.40	5.60
CO	DENVER	5.72	4.44	4.87
CO	GRAND JUNCTION	6.34	5.23	5.85
DC	WASHINGTON	4.69	3.37	4.23
FL	TAMPA	6.16	5.26	5.67
GA	ATLANTA	5.16	4.09	4.74
HI	HONOLULU	6.71	5.59	6.02
IA	AMES	4.80	3.13	4.40
ID	BOISE	5.83	3.33	4.92
IL	CHICAGO	4.08	1.47	3.14
IN	INDIANAPOLIS	5.02	2.55	4.21
KS	DODGE CITY	6.50	4.20	5.60
KY	LEXINGTON	5.97	3.60	4.94
LA	NEW ORLEANS	5.11	3.63	4.92
MA	BOSTON	4.27	2.99	3.84
MD	SILVER HILL	4.71	3.84	4.47
ME	PORTLAND	5.23	3.56	4.51
MI	EAST LANSING	4.71	2.70	4.00
MN	ST. CLOUD	5.43	3.53	4.53
MO	ST. LOUIS	4.87	3.24	4.38
MS	MERIDIAN	4.86	3.64	4.43
MT	GREAT FALLS	5.70	3.66	4.93
NM	ALBUQUERQUE	7.16	6.21	6.77
NB	LINCOLN	5.40	4.38	4.79
NC	GREENSBORO	5.05	4.00	4.71
ND	BISMARK	5.48	3.97	5.01
NJ	SEA BROOK	4.76	3.20	4.21
NV	LAS VEGAS	7.13	5.84	6.41
NY	NEW YORK CITY	4.97	3.03	4.08
OH	CLEVELAND	4.79	2.69	3.94
OK	OKLAHOMA CITY	6.26	4.98	5.59
OR	CORVALLIS	5.71	1.90	4.03
PA	PITTSBURGH	4.19	1.45	3.28
RI	NEWPORT	4.69	3.58	4.23
SC	CHARLESTON	5.72	4.23	5.06
SD	RAPID CITY	5.91	4.56	5.23
TN	NASHVILLE	5.20	3.14	4.45
TX	DALLAS	6.00	4.80	5.43
TX	EL PASO	7.42	5.87	6.72
UT	SALT LAKE CITY	6.09	3.78	5.26
VA	RICHMOND	4.50	3.37	4.13
WA	SEATTLE	4.83	1.60	3.57
WA	PROSSER	6.21	3.06	5.03
WI	MADISON	4.85	3.28	4.29
WV	CHARLESTON	4.12	2.74	3.65
WY	LANDER	6.81	5.30	6.06

SYSTEM LOADS WORK SHEET

1. LIST ALL AC LOADS, WATTAGE & HRS OF USE PER WEEK IN THE SPACE PROVIDED. MULTIPLY WATTS BY HRS/WEEK TO GET WATT-HRS PER WEEK (WH/WK). ADD UP ALL THE WATT HRS PER WEEK TO DETERMINE AC WATT HRS PER WEEK.

DESCRIPTION OF AC LOADS RUN BY INVERTER	WATTS	×	HOURS/WEEK	=	WATT HOURS/WEEK
	TOTAL WATT/HOURS/WEEK				

2. CONVERT TO DC WATT-HRS PER WEEK: MULTIPLY LINE 1 BY 1.15 TO CORRECT FOR INVERTER LOSS. _____
3. INVERTER DC INPUT VOLTAGE: USUALLY 12, 24 OR 48 VOLTS. THIS IS DC SYSTEM VOLTAGE. _____
4. DIVIDE LINE 2 BY LINE 3. THIS IS TOTAL DC AMP-HRS PER WEEK USED BY AC LOADS. _____
5. LIST ALL DC LOADS IN THE SPACE PROVIDED BELOW. IF YOU HAVE NO DC LOADS, ENTER "Ø" IN LINE 7 AND PROCEED TO LINE 8.

DESCRIPTION OF DC LOADS	WATTS	×	HOURS/WEEK	=	WATT HOURS/WEEK
	TOTAL WATT/HOURS/WEEK				

6. DC SYSTEM VOLTAGE. USUALLY 12, 24, OR 48 VOLTS. _____
7. FIND TOTAL AMP-HRS PER WEEK USED BY DC LOADS. DIVIDE LINE 5 BY LINE 6. _____
8. TOTAL AMP-HRS PER WEEK USED BY AC LOADS FROM LINE 4. _____
9. ADD LINES 7 AND 8. THIS IS TOTAL AMP-HRS PER WEEK USED BY ALL LOADS. _____
10. DIVIDE LINE 9 BY 7 DAYS. THIS IS TOTAL AVG AMP-HRS PER DAY THAT NEEDS TO BE SUPPLIED BY THE BATTERY. ENTER THIS NUMBER ON LINE 1 ON THE PHOTOVOLTAIC ARRAY DESIGN WORKSHEET. _____

PHOTOVOLTAIC ARRAY DESIGN WORKSHEET

STEP 1 TOTAL AVERAGE AMP-HOURS PER DAY NEEDED FROM THE SYSTEM LOADS WORKSHEET, LINE 10 _____

STEP 2 MULTIPLY LINE 1 BY 1.2 TO COMPENSATE FOR LOSS FROM BATTERY CHARGE/DISCHARGE _____

STEP 3 AVERAGE SUN-HOURS PER DAY IN YOUR AREA (SEE SOLAR ISOLATION CHART) _____

STEP 4 DIVIDE LINE 2 BY 3. THIS IS THE TOTAL SOLAR ARRAY AMPS REQUIRED. _____

STEP 5 OPTIMUM OR PEAK AMPS OF SOLAR MODULE USED. _____

STEP 6 TOTAL NUMBER OF SOLAR MODULES IN PARALLEL REQUIRED. DIVIDE LINE 4 BY 5 _____

STEP 7 ROUND OFF TO THE NEXT HIGHEST WHOLE NUMBER. _____

STEP 8 NUMBER OF MODULES IN EACH SERIES STRING TO PROVIDE DC BATTERY VOLTAGE (SEE CHART BELOW) _____

STEP 9 MULTIPLY LINE 7 BY 8 TO GET THE TOTAL NUMBER OF SOLAR MODULES REQUIRED. _____

NOMINAL SYSTEM VOLTAGE	NUMBER OF SERIES CONNECTED MODULES PER STRING	
VOLTS	12V MODULE	24V MODULE
12	1	N/A
24	2	1
48	4	2

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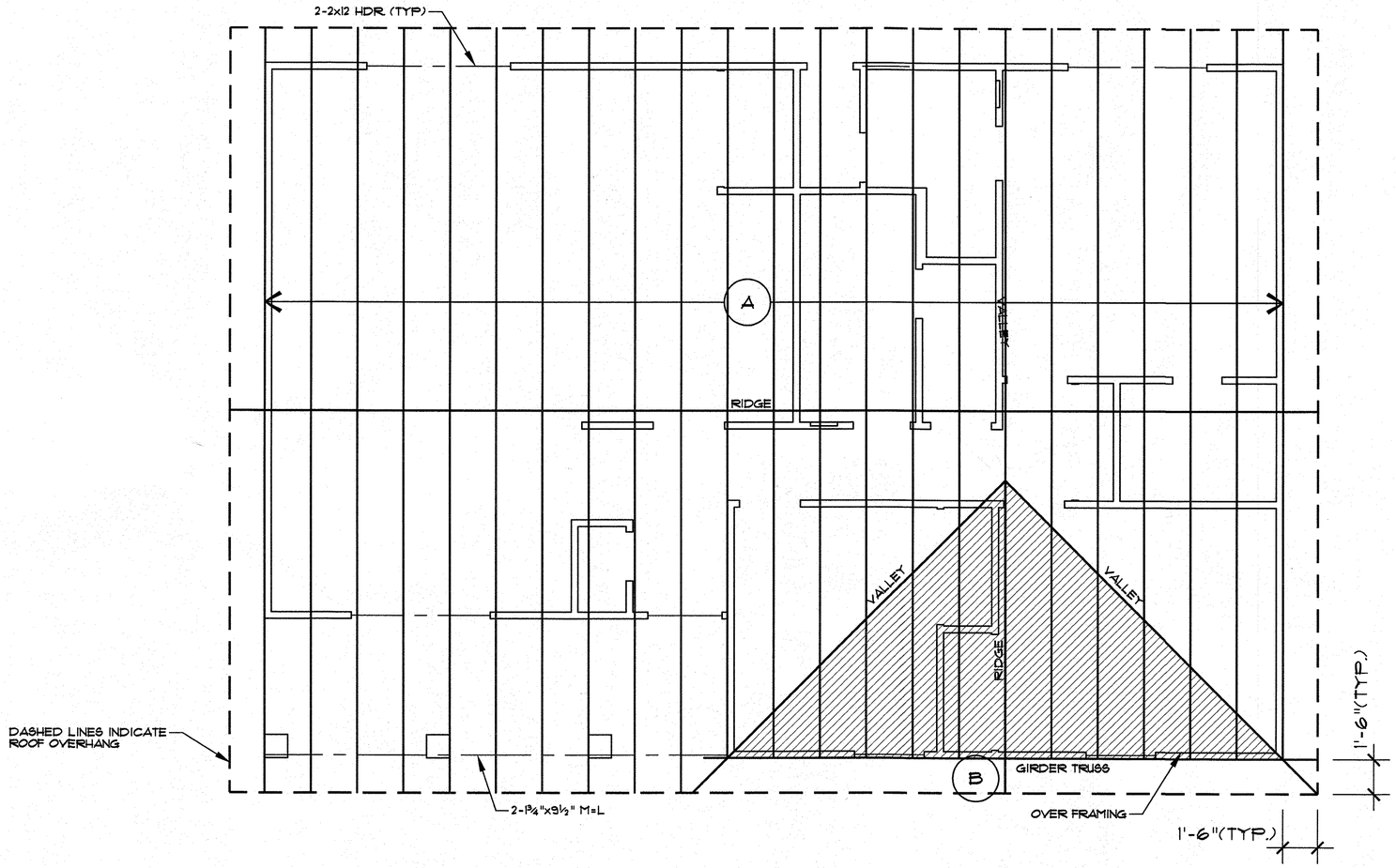
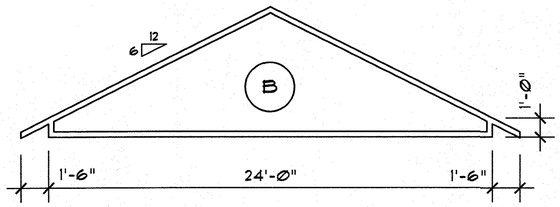


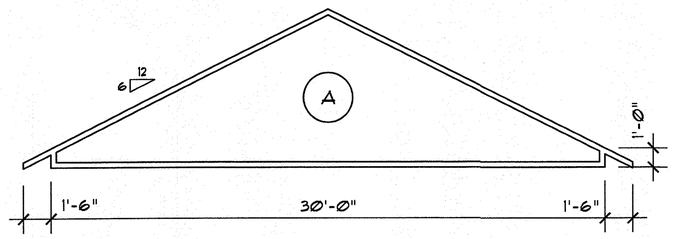
1 ROOF FRAMING FLOOR PLAN

¼" = 1'-Ø"

NOTE: ALL OVER FRAMING TO BE 2x6'S @ 24" O.C. W/ 2x4 VERTICAL SUPPORTS DOWN TO ROOF TRUSSES @ 24" O.C. (TYP.)

NOTE : ALL TRUSSES TO BE SPACED @ 24" O.C. UNLESS OTHERWISE NOTED.





2 PRE-ENGINEERED TRUSSES

3/16" = 1'-Ø"

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sheet index: ROOF FRAMING PLAN
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ELECTRICAL KEY

SWITCHED DUPLEX RECEPTACLE	SMOKE/CARBON MONOXIDE DETECTOR
DUPLEX CONVENIENCE OUTLET	JUNCTION BOX
GFI DUPLEX OUTLET	THERMOSTAT
WEATHERPROOF DUPLEX OUTLET	DOOR BELL
SPECIAL PURPOSE OUTLET	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
DUPLEX OUTLET IN FLOOR	WALL MOUNTED INCANDESCENT LIGHT FIXTURE
220 VOLT OUTLET	RECESSED INCANDESCENT LIGHT FIXTURE
WALL SWITCH	EXHAUST FAN
THREE-WAY SWITCH	FLUORESCENT LIGHT FIXTURE
FOUR-WAY SWITCH	
DIMMER SWITCH	TRACK LIGHT FIXTURE
PHONE JACK	
TV JACK	CEILING FAN W/LIGHT

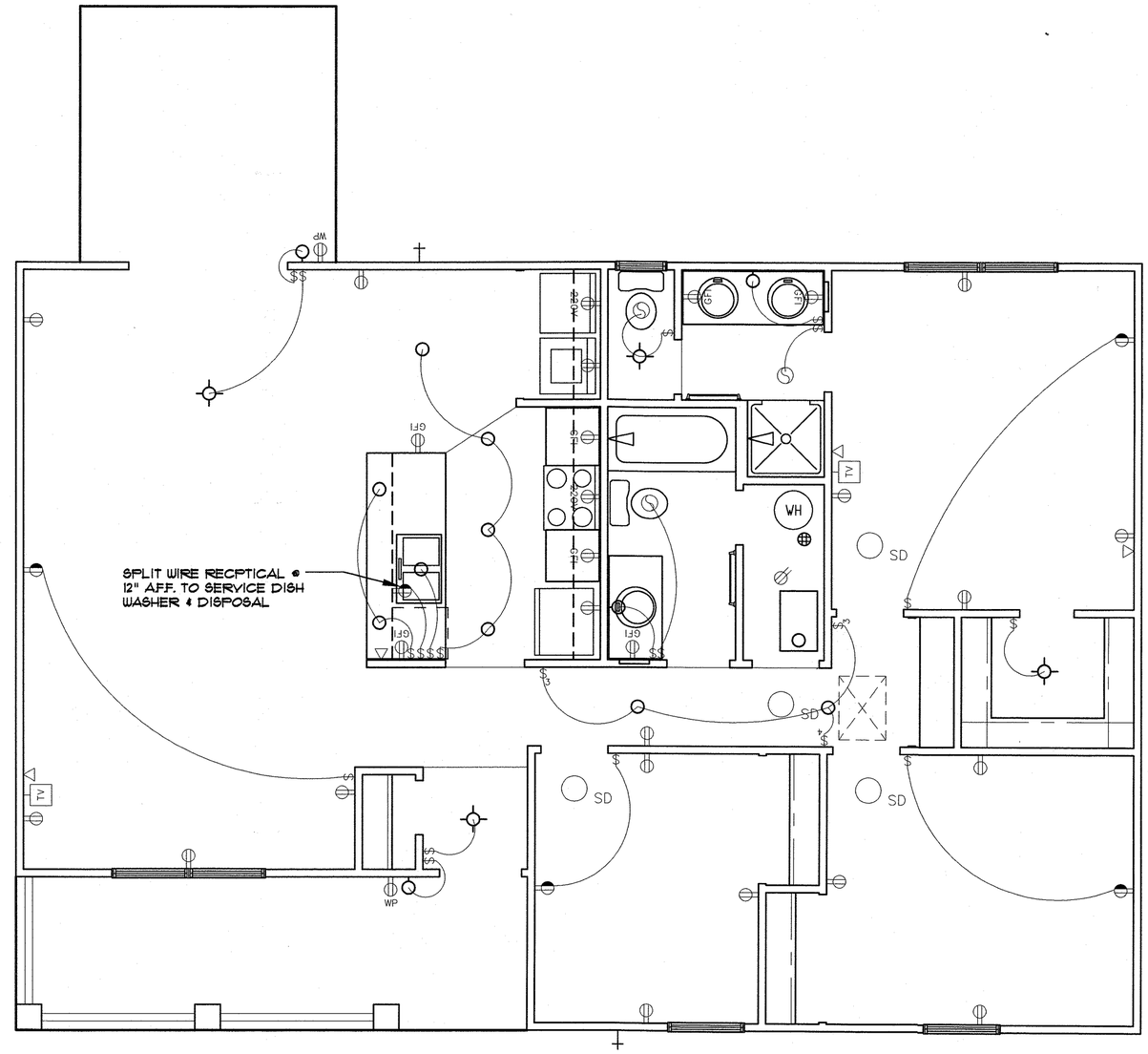
NOTES :

1. PROVIDE AND INSTALL INTO AN UNSWITCHED BRANCH CIRCUIT, SMOKE DETECTORS AS LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (I.R.C.) SECTION R314 AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED SUCH THAT THE ACTUATION OF ONE ALARM WILL ACTUATE ALL THE ALARMS IN THE INDIVIDUAL UNIT.
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT INTERRUPTERS (G. F. I.'S) PER NATIONAL ELECTRIC CODE OR AS REQUIRED BY GOVERNING LOCAL CODES.
3. ALL BRANCH CIRCUITS TO BE COPPER ONLY
4. PROVIDE AND INSTALL ARC FAULT CIRCUIT INTERRUPTERS (A.F.I.) IN ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SHIGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN THE DWELLING UNIT PER NATIONAL ELECTRIC CODE OR AS REQUIRED BY GOVERNING LOCAL CODES.
5. PROVIDE AND INSTALL IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (I.R.C.) SECTION R315 CARBON MONOXIDE ALARMS OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S). THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED. CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH THE UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CODE AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. RECESSED LIGHTING FIXTURES. WHEN INSTALLED IN THE BUILDING ENVELOPE, RECESSED LIGHTING FIXTURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS:

   1. TYPE IC RATED, MANUFACTURED WITH NO PENETRATIONS BETWEEN THE INSIDE OF THE RECESSED FIXTURE AND CEILING CAVITY AND SEALED OR GASKETED TO PREVENT AIR LEAKAGE INTO THE UNCONDITIONED SPACE.

   2. TYPE IC OR NON-IC RATED, INSTALLED INSIDE A SEALED BOX CONSTRUCTED FROM A MINIMUM Ø.5-INCH-THICK GYPSUM WALLBOARD OR CONSTRUCTED FROM PREFORMED POLYMERIC VAPOR BARRIER, OR OTHER AIR-TIGHT ASSEMBLY MANUFACTURED FOR THIS PURPOSE, WHILE MAINTAINING REQUIRED CLEARANCES OF NOT LESS THAN Ø.5 INCH FROM COMBUSTIBLE MATERIAL AND NOT LESS THAN 3 INCHES FROM INSULATION MATERIAL.

   3. TYPE IC RATED, IN ACCORDANCE WITH ASTM E 283 ADMITTING NO MORE THAN 2.0 CUBIC FEET PER MINUTE OF AIR MOVEMENT FROM THE CONDITIONED SPACE TO THE CEILING CAVITY. THE LIGHTING FIXTURE SHALL BE TESTED AT 1.57 POUNDS PER SQUARE INCH (PSI) PRESSURE DIFFERENCE AND SHALL BE LABELED.



1 MAIN LEVEL ELECTRICAL PLAN
1/4" = 1'-0"

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sheet index: ELECTRICAL FLOOR PLAN
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