



Revised 12/6/07

## Building Department 2006 IRC Plan Review Check Sheet

Date: \_\_\_\_\_

Job Address: \_\_\_\_\_

A circle around the corresponding number listed before the item to be corrected identifies additional corrections needed. Please revise and re-submit the plans after the corrections indicated below have been made.

### FOUNDATIONS:

1. Provide Address numbers readable from the street that the project is addressed on, prior to first inspection R321.1
2. Retaining walls greater than 4' in height measured on top of footing, require engineering – R404.1.3 Per Town of Payson amendments, stem walls must be designed to have #4 rebar reinforcement placed 4' horizontally and vertically.
3. Under-floor ventilation must be installed at a rate of 1sq. ft. for every 150sq. ft. of area –R408.1
4. Minimum crawl hole size in floors is 18"x24", in exterior walls is 16"x24" with a light required – R408.4/E3803.4
5. Anchor bolts min. 7" in masonry or concrete, min. 2 per board 6' max. apart within 12" of ends – R403.1.6
6. Stepped foundations is required when grade exceeds 1'/10' ratio –R403.1.5
7. UFER ground wire is to be installed in footing and will be inspected at footing inspection – E3508.1.2
8. Stem walls shall have one #4 rebar within 6" of top of wall – Town of Payson Amendment.
9. Cleanouts are required for reinforced hollow unit masonry walls to be grouted at intervals exceeding 5' with special inspection required for grout pours exceeding 5'. In no case shall grout be pumped in greater than 8' lifts even with special inspection. –R609.4.1 (4.)
10. Footing rebar is required to run continuous through garage doors. -R602.10.6
11. Compaction tests will be required to determine proper compaction for fills for non-structural slabs on grade that are 4' or more above natural grade. –R401.4
12. Certified compaction will be required for all fills in excess of 1' under bearing conditions.
13. Bond beams are required at structurally connected walls and floors and at top of walls –R606.11 – Figures 606.11 (1-3)
14. Terminate grout lifts min. 1" below top of block R609.1.2
15. Masonry bed joints are not to exceed 3/8" except starter course that may be 1/4"-3/4" –R607.2.1

### FLOOR FRAME:

1. The use of engineered floor trusses will require that an engineered floor truss plan depicting layout be submitted –R106.1.1
2. Dimensional lumber floor joist spans –Table R502.3.1 (1) Table R502.3.1 (2)
3. Floor beam spans –Table R502.5 (1&2)
4. Floor joist exceeding 2x12 need solid blocking at intervals not exceeding 8' O.C. R502.7.1

5. Under-floor minimum clearances 18" to underside of joists, 12" minimum to underside of beams –R319.1
6. Provide proper post to beam connections –R502.9
7. Provide floor sheathing sizes –R503.1
8. Floors above adjacent levels, more than 30" difference in height require installation of a 36" guardrail with no space that a 4" ball can pass through –R312
9. Landings are required at the one required main entry door within 1-1/2" of top of threshold. Other doors may have up to an 8" step down to exterior landing, or to stairs with no more than two risers provided the door does not swing over the exterior stairs, or landing that is more than 8" below the threshold. –R311.4.3
10. Double floor joists are required under parallel walls –R502.4
11. Solid blocking required within a joist depth laterally at beams and girders (conventional floor framing) –R502.7
12. Treated plate is required on masonry interior and exterior walls if no vapor barrier, exterior only if V.B installed –R319.1
13. Protection against termites shall be chemical soil treatment and/or pressure preservative treatment and naturally resistive wood –R320.1 –R320.2
14. A sub floor inspection is required for all slabs on grade and any wood floor crawl space if less than 4' height from bottom of floor joists –R104.10

#### **GENERAL FRAMING:**

1. Provide structural elevation showing footing through to roof typical framing –R106.1
2. Provide approved vapor barrier when required –R318.1
3. Habitable rooms must have 8% of floor area for light and 4% of floor area for ventilation –R303.1
4. Stairway min. width 36" Maximum stair height 8" Minimum tread run 9" with no variation more than 3/8" widest to narrowest or shortest to tallest. Minimum 6' 8" headroom height, Max. 12' vertical height between landings, four or more risers require a handrail 34"-38" vertically above stair nosing –R311 as amended by Town of Payson
5. All interior and exterior stairways shall be illuminated with light activation for interior stairs available at top and bottom of stairway. Exterior stairways shall be controlled from inside of dwelling unit –R303.6 - R303.6.1
6. Walls and soffits under stairs are required to be fire rated –R311.2.2 as amended by the T.O.P
7. Minimum one exit door required 3' X 6'8" -R311.4
8. Fire rated construction required on garage side of wall between house and attached garage up to roof sheathing, or ceiling and walls supporting ceiling must be rated. No unprotected opening permitted. Doors shall be 1-3/8" solid core, or have 20 minute rating label attached with minimum 2 self closing hinges –R309.2 as amended by Town of Payson
9. Garage cannot open to bedroom –R309.1
10. All required egress windows shall have a minimum of 5.7sq. ft. of openable area. Min. 24" clear height, Minimum 20" clear width installed so that sill is not more than 44" above finished floor elevation –R310 as amended by T.O.P.
11. Fireplace & chimney details, with hearth minimum 16" out and 8" to each side of opening, minimum 2" clearance to combustibles unless 12" or more away from flue lining, then no clearance is required. Also, if an approved fire chimney liner is used, no separation from the chimney is required for masonry built fireplaces. Install 20" minimum hearth if fireplace opening is 6sq. ft. or larger –R1001.10 –1001.11
12. Safety glazing is required to be permanently labeled into glass –R308.1
13. Diagonal bracing and shear requirements per Sec. R602.10 - Table R602.10.1 –Table 602.10.5
14. Bathrooms require mechanical ventilation if no exterior openings 50 cfm per minute intermittently –R303.3
15. Header sizes must be called out on plans including garage doors –R602.7 – Table 502.5(1) – Table 502.5(2)

16. Weep screeds are required for stucco systems –R703.6.2.1
17. Garage front returns require 4', or at least 16" up to 10' with hold downs fully sheared on one side – 24" for 2-story with hold downs sheared on one side. R602.10.6.2
18. Studs supporting two floors and a ceiling must be 2 x 6- 16" O.C. –Table R602.3 (5)
19. Habitable rooms must be at least 70 sq. ft. not less than 7' wide with min 7' headroom –R304.
20. Specify Manufacturer model and approved testing number for factory built fireplaces, or woodstoves –R1004.1
21. Exterior grade plywood is required on overhangs –R803.2.1.1
22. Fire-blocking is required at 10' intervals vertical and horizontal in concealed spaces –R602.8
23. 6d common Minimum shear nailing for shear panels –Table R602.3 (1)
24. Penetration sealing is required –R602.8

## **ROOF FRAMING:**

1. Roof framing plan is required showing layout and connections –R106.1.1
2. Rafter/Ceiling joists spans are required to be shown –R106.1 - Table R802.5.1(1)
3. Truss specifications including layout engineered connections are required to be shown – R802.10.1
4. Minimum attic access is 22" x 30" with switched light & minimum 30" headroom –R807.1 - M1305.1.3 – M1305..1.3.1
5. Laterally block rafters and trusses at bearing –R802.10.3
6. Minimum ceiling height in habitable spaces is 7' also Kitchen, bathrooms and hallways –R305.1 as amended by the T.O.P
7. Minimum sheathing spaces and sizes –Table R602.3 (1)
8. Minimum 4/12 roof pitch for shingles, except that 2-1/2:12 to 3-1/2:12 require 50% paper lap – R905.2.7
9. Added roof weight must be considered on roof calculations (tile roofs) –R905.3
10. Provide calculations for roof ventilation at 1 sq. ft. for every 150 sq. ft. of area –R806.2
11. Provide stairway details –R311 –R106.1.1
12. Prior to the placement of roofing paper a roof nailing inspection is required, roof should be nailed with 8d commons Table R602.3. (1)

## **ELECTRICAL:**

1. Size electrical service 100 amp minimum, permanently identify breakers E3502.1 –E3304.11
2. Install wall switched controlled lighting to habitable rooms, baths, outside, halls, stairs, garages – E3803.2 –E3803.3
3. Smoke detectors 120/V W/battery backup interconnected in bedrooms, halls, vaulted ceilings R313 installed per manufacturers installation instructions.
4. Minimum one exterior outlet in front and one in rear maximum 6'6" above grade, required E3801.7
5. Closet lighting no closer to shelf than 12" for incandescent, or 6" for fluorescent/recessed with completely enclosed lamps E3903.11
6. GFCI receptacles are required in kitchen, counters require a receptacle if at least 12" wide and shall be spaced so that no counter space is more than 24" from one. E3801.4.1 – E3802.6
7. Box wire fill shall be in accordance with E3805.12
8. Receptacles shall be spaced not more than 12' apart and so that no wall space more than 2' wide is more than 6' from one –E3801.2.
9. Arc Fault protection is required for branch circuits feeding all sleeping rooms -E3802.12
10. GFCI protection is required for all spa areas, garages, bathrooms and exterior locations –E3802
11. A minimum of 2 separate 20 Amp circuits are required to be installed in kitchens –E3603.2
12. Fixtures in damp or wet location shall be listed for such use –E3903.8
13. Panel boards may not be located in clothes closets –E3605.7

14. Water and all interior gas piping is required to be bonded to electrical services –E3509.6 – 3509.7
15. Electrical in party walls to be installed per –E3302.2 or UL-263
16. All fixtures are required to be grounded –E3903.3
17. IP fixture cans are required to have minimum 3” clearance to insulation –E3904.9
18. A 20 Amp dedicated circuit is required for bathroom receptacles –E3603.4

### **MECHANICAL:**

1. Location, type & size of HVAC equipment are required –R106.1 Calculations shall be provided showing how the size of the unit and size of the ductwork were determined.
2. LPG piping installed under buildings shall be encased in a conduit of wrought iron, plastic pipe, or steel pipe. Such conduit shall extend not less than 4” outside the building, shall be vented above grade to the outdoors, and shall be installed so as to prevent the entrance of water and insects. IFGC 404.11
3. Raise HVAC equipment located in a garage so that equipment that generates a glow, spark or flame is at least 18” above the floor –M1307.3 – G2408.2
4. Access to attic furnaces shall not exceed 20 ft. W/Minimum 22” wide, 30” high unobstructed passage to the unit and a minimum 30” x 30” working platform at the service side of the unit, with a 20 Amp outlet and switched light –M1305.1.3
5. Combustion air is required within the upper 12” and lower 12” of an FAU enclosure with 1sq. inch per 1000 Btu –M1702.2
6. Vent all moisture exhaust ducts to the exterior, fans, dryer, etc. –M1501.1
7. Every dwelling unit shall be provided with heating facilities capable of maintaining 68 degrees Fahrenheit at 3’ above the floor –R303.8
8. Fuel burning appliances are prohibited in a closet, bedroom, or bathrooms except direct vent appliances in bathrooms and bedrooms – G2406.2
9. Gas piping shall be pressure tested before final inspection with a minimum of 10 PSI for 15 minutes IFGC 406.4.2
10. Condensate lines are to be installed with uniform slope minimum ¾” pipe size –M1411.3.1
11. Minimum 30” vertical clearance above range to unprotected combustible material above – M1901.1
12. Cooling equipment installed in an attic or furred space requires a secondary drain pan – M1411.3.1
13. Condensate control is required –M1411.3
14. Appliances located in a garage or carport shall be protected from impact by automobiles – M1307.3.1

### **PLUMBING:**

1. Plumbing pipes shall not be directly embedded into concrete –P2603.3
2. Water closets shall be located in a 30” wide clear area, with 21” clear in front –Figure P307.1
3. Pipe water heater T&P line to the outside with grade not reduced, terminated 6-24” above grade –P2803.6.1 Amended
4. Gas water heaters prohibited in bathrooms, clothes closets, or bedrooms –M2005.2
5. Location and type of water heater is required on plans –R106.1.1
6. Vent Clearances 2’ above or 10’ away from any window or other openings –P3103.5
7. Trap arm length maximums: 1-1/2”= 6’-- 2” = 8’-- 3” = 12’-- 4” = 16’ –Table P3105.1
8. Total vent size shall be ½ the required diameter of the drain served –P3113.1
9. Washing machine standpipe 18” to 42” –P2706.2
10. Private water valve required at services and ahead of all fixtures –P2903.9.1 & P2903.9.3
11. An accessible shut off valve is required at all gas appliances –G2420.5
12. Paint all sunlight exposed plastic plumbing pipes with latex paint –Per Manufacture

13. Dishwashers shall be equipped with a proper air gap fitting on drain lines unless manufacturer's specifications approves appliance can be installed without –P2717.1
14. Pressure testing of plumbing required at Frame Inspection –P2503
15. Access panels required for plumbing –P2704.1 & P2720.1

**MISSCELLANEOUS:**

1. List currently adopted codes on cover page of plans: **2006 IRC** per IRC106.1.1
2. Address of project must be clearly placed on each page of prints –IRC106.1.1
3. List area of house, garages and any porches, or decks on plans –IRC106.1.1
4. Re-inspections resulting from a project not being ready, may result in a charge of \$50.00 being assessed, which will be required to be paid prior to scheduling subsequent inspections for that particular project
5. Special Inspection requested before working hours or after normal working hours 7AM-5PM (weekdays) are charged at the rate of \$50.00 per hour with a minimum of a one hour charge.
6. Special Inspection requested on holidays and weekends are charged at \$50.00 per hour with a two hour minimum charge
7. Special Inspections must be paid for at the time that the request is made.
8. Additional plan review charges required by changes, additions, or revisions to reviewed plans will be charged at \$50.00 per hour with a minimum 1 hour charge
9. Expedited plan review may be requested and are subject to the availability of review staff to conduct this request in the timeframes requested. The fee for such a request will be based on \$50.00 per hour in addition to the regular fees charged.
10. Inspection requests shall be placed one day before the inspection is needed. Inspections are scheduled upon availability.
11. Install all listed appliances per manufacturer's listings & installation requirements