

# Jefferson County Division of Building Safety

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Common Corrections

# Structural

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## © Footings:

1. Layout and configuration to be per approved plans.(R106.4)
2. Location on lot per plot plan. (R106.2)
3. Steel size, grade, and location per approved plans.(R106.4)
4. Place below frost line.(R403.1.4.1)
5. Place adequate distance from slopes.(R403.1.7)
6. Place on soil free from frost.(R403.1.4.1)

# Structural

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## ◎ Piers:

1. Compliance to include JCS Appendix
2. Layout and configuration per approved plan.(R106.4)
3. Foundation Compliance Form to be stamped by engineer.



# Structural

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## ◎ Foundations:

1. Hold downs and anchor bolts to be located per approved plans.
2. Rebar to have concrete coverage per ACI 318-15.
3. Full bearing on footing or caissons.
4. Lap splices too short. [R404.1.2.3.7.5 & R611.5.1(1)]
5. Vertical rebar may not be driven into earth to be set for wall.

\* Lap splices cited in 2015 IRC as R608.5.4.3

# Structural



## © Structural Basement Floor:

1. Beam to bear adequately in pockets and saddles.
2. Untreated wood to be 18" above dirt. (R317.1)
3. Area to be free of debris. (R408.5)
4. Joist size, span, & spacing to be per approved plan.(R109.1.1)
5. Monoposts to bear on pads or caissons (R407.3)
6. Provide ventilation. (R408.4)

# Structural

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## © Roof & Wall Sheathing:

1. Fasten per nailing schedule on plan.
2. Block seams if finish is to be stucco .
3. Nails over driven or missing framing members.
4. Shear patterns 3" OC or less require two studs where sheets break.

# Structural



## ◎ Studs:

1. To be nailed per Table R602.3(2)
2. Sized per Table R302.3(5), (R602.3 & R301.3)
3. Studs not excessively notched or bored. (R602.6)



# Structural



## © Joists:

1. Joists not to be excessively notched or bored.(R502.8)
2. Nailed per Table R602.3(1)
3. Size Tables R502.3.1(1) & R502.3(2)
4. Blocking (R502.1.2 & R502.7)
5. Joist hangers installed using proper fasteners.
6. Micros not to be notched or bored.(R502.8.2)



# Structural

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## © Framing:

1. County approved documents to be on site.
2. Trusses to be installed, attached, and braced per truss package.
3. All point loads to be posted to foundation.
4. Fire block & draft stop per R302.11 & R302.12.
5. Headers, beams, micros to match size and location on plan.

**\*2015 IRC - cellulose insulation meeting ASTM E 119 or UL 263 acceptable fireblocking materials**

# Structural

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## © Framing:

6. All point loads to be posted to foundation. Add posting, pack outs, and squash blocks as required.
7. Header, King and Jack studs to match schedules on plan.
8. Anchor bolts required within 12" of each side of sole plate splice and corners.
9. Follow I Joist manufacturer specs for allowed knockouts, pack outs, and web stiffeners .

# Structural

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## ◎ Framing:

10. Floor assemblies not otherwise required in the IRC to be fire resistance rated **shall** be protected by a ½" gypsum board membrane, 5/8" wood structural panel membrane, or equivalent on underside of member. See code section for conditions and exceptions. (R501.3)



# Structural

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## ◎ Final Building:

1. Permanent address marked.
2. Roofing completed. (R903.1)
3. No areas open to weather.
4. Flashing and counterflashing installed properly.
5. All jacks are installed.
6. Exterior is weather sealed. (R703.1)
7. Cantilevers are insulated and soffit material is installed.
8. Duct terminations are sealed.
9. Pipe penetrations are sealed.
10. Smoke Detectors are installed. (R314)
11. Carbon monoxide detectors are installed. (R315)
12. Stairs comply with R311.
13. All areas finished per plan. (R106.4)

# Decks

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1. Piers to reach min. frost depth of 36" or depth prescribed on plan.
2. Ledger connection to match plan.
3. Use of correct fasteners for hangers, and driven in a manner not to deform the hanger's plane of contact.
4. Composite decking on stairs rated for span between stringers by manufacturer.
5. Guard height minimum 36" as measured from walking surfaces or adjacent fixed seating, min. 34" max 38" handrail height.

**\* 2015 IRC does not require min. guard height to be measured from adjacent fixed seating.**

# Decks

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6. Posts bearing on pads or caissons with connectors.
7. Caissons and pads to be inspected.
8. Beam splices to occur over posts.
9. Micros to be rated for exterior use or weather protected.
10. Stairs to comply with R311.
11. Rise and run within 3/8"
12. Handrails to comply with R311.7.8
13. Terminate ends of handrails per R311.7.8
14. Guards must withstand 200lbs lateral force. Table R301.2



# Roofing

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## ◎ Mid-roof:

1. Nails to be driven flush and located per package instructions.
2. Ice barrier to extend 24" in from exterior wall.
3. No nails within 6" of valley center.
4. Minimum 2.5/12 slope for tile, 2/12 for asphalt shingles.
5. Daylight all pan flashings on tile.

# Roofing

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## ◎ Final Roof Inspection:

1. Provide Ladder access for eaves over 10' high or split levels.
2. Kick-out diverters required at ends of step-flashing.
3. Mansard installation per manufacturer's instructions including hand sealing and nailing.
4. Flashing to be installed at roof to soffit intersections (R903.2.1).

# Electrical

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## © Installation:

1. 110.3(B) Listed or labeled equipment **shall** be installed per manufactures instructions.
2. 110.12(A) & 3.14.17(A) Unused openings **shall** be closed.
3. 110.26(A) Working space about electrical equipment.



# Electrical

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## © Wiring & Protection:

1. 200.4(B) ID Neutral w/ circuit conductors.
2. 200.6 ID Neutral (Grounded Conductor) White or Gray.
3. 210.8(A)(7) GFCI protection within 6' of any sink.
4. 210.8(A)(10) GFCI required for laundry/clothes washer.

# Electrical

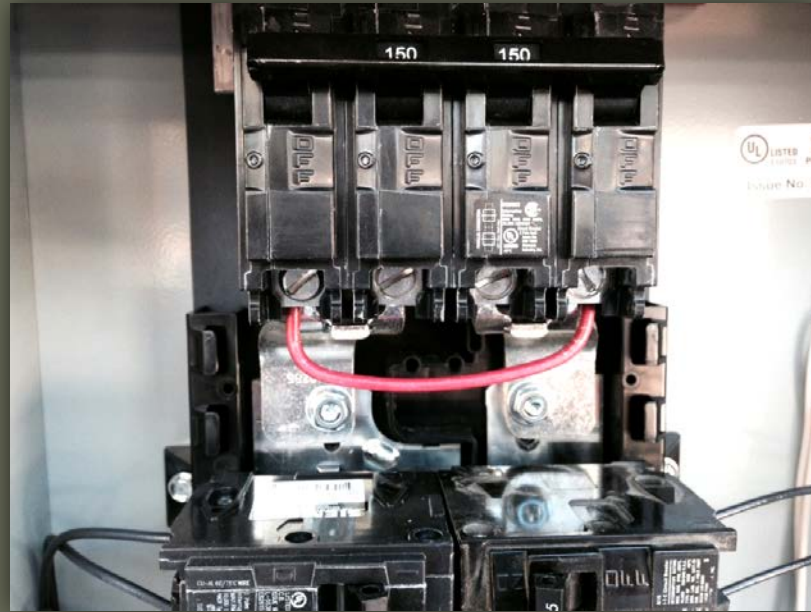
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## ◎ Grounding:

1. 250.32(B)(1) EGC **shall** be run with the supply conductors.
2. 250.53(A)(2) Supplemental Electrode required.
3. 250.66 GEC sizing only.
4. 250.102(C)(1) Bonding Jumper sizing.
5. 250.121 EGC **shall not** be used as GEC.

# Electrical



## © Wiring Methods:

1. 300.4(A)(1) Bored holes 1.25" from edge require Notch Plates.
2. 300.5 Table Underground burial depths.
3. 300.9 Raceway above grade: conduit interior is a wet location.
4. 334.23 for NM cable: see 320.23 Guard Strips required within 6' of attic scuttle.

# Electrical

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## ◎ Equipment:

1. 406.5 Receptacle Mounting: installation trim, location, and position.
2. 406.9(B)(1) Wet location in use receptacle cover rated “Extra Duty” & receptacle **shall** be listed Weather Resistant (WR).
3. 406.12 Tamper Resistant (TR) receptacles required.



# Electrical

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## ◎ Equipment:

4. 410.2 & 16 Luminaires in Closet Storage Space.
5. 410.36(B) Luminaires in suspended ceiling (Tee Grid) fastened w/ bolts, screws, rivets, ect... unless clips are listed.
6. 410.44 Luminaires and equipment **shall** be mechanically connected to an equipment grounding conductor as specified in 250.118 and sized in accordance with 250.122.

# Electrical

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## © Solar PV Systems:

1. 690.43(B) ECG required between a PV array & other equipment **shall** be required in accordance w/ 250.110
2. 690.43(F) All conductors shall be run together.
3. 690.31(G)(2) Flexible wiring methods: guard strips required.
4. 705.12(D)(2) Bus or Conductor Ampere rating: sum of 125%

# Plumbing



## ◎ Underground:

1. Backfill shall be on a solid bed, free of rocks, broken concrete and chunks (306.3).
2. Horizontal DWV to slope  $\frac{1}{4}$  inch per foot to sewer for pipe less than 3" in diameter and  $\frac{1}{8}$  inch per foot for pipes greater than 3" in diameter.



# Plumbing

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## ◎ Underground:

3. All pipes, connections, and adhesives to be listed.
4. Underground plumbing to be installed per layout on plan.
5. Piping to be sleeved through foundation wall or relieving arch to be installed.
6. All pipes to be under test.



# Plumbing

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## ◎ Rough Plumbing:

1. Pipe to be supported on schedule based on type.
2. Cleanouts to be readily accessible.
3. All pipe to be under test based on use and type.
4. Pipe protection necessary.

# Plumbing

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## ◎ Rough Plumbing:

5. Cleanout required at the base of stack.
6. Air admittance valves to be installed per manufacturer.
7. Vent cannot be horizontal until 6" above the flood level rim of the fixture served.

# Plumbing



## ◎ Shower Pans:

1. Maintain min.  $\frac{1}{4}$  inch per foot slope into drain.
2. Slope bed to be run under membrane.
3. Membrane to be listed material.
4. Drain to be sealed to liner.
5. Pan to be under test with a min. 2" of water at threshold for 15 min.
6. Drain to be exposed during liner test, with test below liner.

# Plumbing

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## ◎ Water Heaters:

1. Water heaters in locations without a floor drain must drop TPT to proper discharge point.
2. Closed systems to have expansion tank properly supported on structure.
3. Any make up or combustion air to be provided based on requirements of appliances.
4. Pan drains and TPT's must maintain proper air gap.



# Plumbing

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## ◎ Final Plumbing:

1. All fixtures to maintain min. air gaps per code and manufacturer specifications.
2. Tub and shower valves to be set a max 120 degrees with a high temp limit stop.
3. Tub motor and thermostatic mixing valves to be readily accessible for service.

# Plumbing

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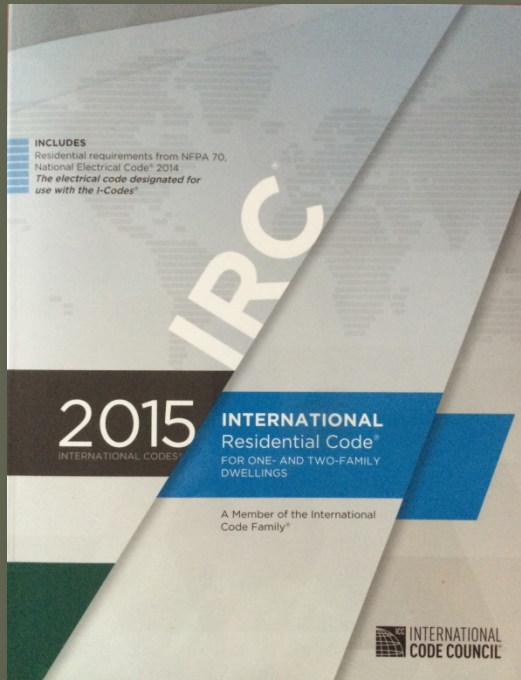
## ◎ Final Plumbing:

4. Any make up or combustion air to be provided based on requirements of appliances.
5. All quick closing valves require hammer arrestors. (specifically solenoid valves and pneumatic valves)
6. Backflow devices to be tested.

# 2015 Codes – January 1<sup>st</sup>

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## 2015 IRC UPDATE CLASSES



- ◉ Wednesday, August 12
- ◉ Wednesday, October 14
- ◉ Tuesday, December 1