New Build Inspection Checklist

Saw Service

- Weather head must be within the top 2ft of the pole and have at least 18”of wire extending through the weather head for the service company to connect to. At no time shall the drip loop be less than 10’ from the ground.
- PVC Conduit is acceptable for the weather head. Size is based on the amperage of the service panel.
- Top of the meter base should be mounted at 6ft from the ground line.
- The pole must have at least one outlet below the breaker panel. All outlets must be GFCI type or GFCI breaker. The outlet must also have weatherproof cover.
- The ground rod should be at least 8’ in length and 5/8” in diameter. Ground clamp should be a tear drop single bolt style and not the 2-bolt water pipe style.

Footing

- Project address clearly marked R319.1 & IFC 505
- Verify set-backs , projections and opening in relation to property lines (if fire wall related R302.1)
- Approved building plans and building permits should be on site and weather protected at all times R105.7, R106.3.1 & R106.4
- All exterior footings shall be placed at least 12 inches below undisturbed soil. Formed footings are only allowed below undisturbed grade plane. (i.e. Basements). (R403.1.4)
- All lose soil, mud or water removed from bottom of footing. Debris and water removed from areas in contact with concrete
- Rebar is properly placed and the steel grade, size, spacing, splicing, relation to earths soil and cover coincides with R403.1, R608.5.4, R404.1.3.3.7.4 & R404.1.3.3.7.4
- Bulk Heads in place where necessary
  When concrete is poured a minimum of 7” of the anchor bolt is imbedded.

Plumbing Underground

- Protection of plastic piping in contact with concrete UPC / CPC 312.2 & 312.10
- Filling the building sewer (stand pipe) should be filled not less than 5ft (residential) of head water P2503.4
- Main drain line slope
- Any PVC in contact w/cement either sleeved or wrapped
- Hot water supply line insulated (in unfinished areas)

Slab

- Firmness of prepped area
- 10-Ply Overhang 4 ft. or seams taped
- Reinforcing mesh (if required) Raised on chairs (must be off Poly)
- Slabs must be a minimum 3.5 inches thick and capable of carrying all loads (R506.1)
- Termite treatment is required. Provide termite treatment letter before final inspection. (R318)

OPEN FLOOR

- 2 x 6 Treated mud seal
- 10” Anchor Bolts
- Anchor Bolt Location
- Pier Locations
- Joist Hangers or 2”x 2” Runner
- Span of beam
- Joists less than 18” above ground must be treated
- Girders less than 12” above ground must be treated
- Girder ends in concrete must have a ½” clearance on All Girder Sides
- Anchor Bolts must be galvanized (unless larger than ½” in diameter)

FOUNDATION

- Top of stem wall will project a minimum of 6” above finished grade.
- Surface drainage is away from foundation walls a minimum of 6” for the first 10’.
- House vent located 36” from each corner of the house Wall thickness is based upon walls supported. Minimum thickness for single story masonry foundations is 6 inches, two stories is 8 inches. (R606.4.1). Pier and Curtain wall is allowed on light frame construction supporting a maximum of 2 stories in height using a minimum of 4 inch masonry at a maximum of 48 inches in height. (R404.1.5.3). Pier and veneer is an acceptable practice but still must meet the foundation anchorage and header span supporting the floor(s) above.
- Under floor spaces containing mechanical equipment shall be provided with an unobstructed passageway large enough to remove the largest appliance, but not less than 30” high x 22” wide and no more than 20 feet in length (M1305.1.3)
- The minimum net area of crawlspace ventilation openings shall not be less than 1 square foot for each 150 square feet of under floor space area. One opening shall be within 3 feet of each corner. If ground is covered with an approved vapor retarder, the ventilation openings can be reduced to 1 square foot for each 1,500 square feet of under floor space. Notice: An 8”x 16” foundation vent does not equal to one square foot of ventilation. (R408.2)
- 8 inch CMU piers cannot exceed 80 inches in height. 8 inch CMU Piers over 32 inches height must be filled solid and capped. Hollow piers shall be capped with 4 inches of solid masonry or concrete or shall have the top course filled with concrete or grout. (R606.7, R606.7.1)
- Provide Lintels over masonry openings. (R606.10)

NAIL PATTERN W/O HOUSE WRAP

- Galvanized nails every 6” along bottom
- Nails every 6” along both sides of seams and every 12” on center
- Blocking up to 4ft from each edge (where two sheets join)

FRAMING ROUGH-IN

- All sub-trade rough-ins (plumbing, gas, mechanical and electrical) must be completed and inspected before insulating. (R109.1.2)
- Anchor bolt location’s 12” off edge , Every 6’ in between R403.1.6

- Portal framing tie downs R602.10.6.2 & R602.10.5
- All chased (mechanical, structural) fire blocked at top
  - "I" Joists blocked between joist and hangers (with 2"x4")
  - 4 ply LVL must be screwed together (not nailed)
  - 2 ply LVL may be nailed in 4 rows 12" apart
  - LVL must have Jack studs transferring weight to slab (four ply – four 2"x4", two ply – two 2"x4")
  - Load bearing interior walls bolted (or strapped) to slab.
  - The required egress door must have a clear width of 32 inches and a clear height of 78 inches. Every sleeping room must have an emergency egress window or exit door. The window sash must open clear at least 20 inches wide, 24 inches tall, be within 44 inches of the floor and have an overall opening size of 5.7 net clear square feet (821 square inches). A sleeping room is any room with a clothes closet including basements and bonus rooms. (R310, R311)
  - Every stair must be a minimum of 3 foot wide and have a 3-foot by 3-foot landing at the top and bottom unless it meets one of the exceptions in the code. Stair headroom, measured from the slope of the stairs, must be a minimum of 6'- 8". (R311.7.2, R311.7.6)
  - Cuts, notches and holes bored in laminated veneer lumber, glue-laminated members or I-joist are not permitted beyond the manufacturer's installation instructions. Truss members shall not be altered in any way without the approval of a design professional. Truss design drawings shall be provided at time of inspection. Use "hurricane clips" and roof tie-downs as specified per manufacturer or as required per Table R802.11. (R502.8.2. R502.11, R802.10.1, R802.11)
  - All load bearing members must be grade stamped. (R602.1)
  - Fire blocking shall be in place. Use ASTM E136 caulk and other approved material to seal vertically at the ceiling and floor levels and horizontal penetrations not exceeding 10 feet. (Enclosed chases, floor/ceiling penetrations, soffits, stairs and tubs, etc.) (R302.11, R302.11.1)
  - Glazing in windows in hazardous locations must be tempered. (ie; doors, next to doors, over tubs, large picture windows, etc.). Any glazing within 60 inches horizontally or vertically of a bathtub or shower is required to be tempered. Glazing within 36 inches vertically of a stair tread or landing and less than 60 inches horizontally to the bottom stair landing is required to be tempered. (R308.4, R308.4.5, R308.4.6, R308.4.7)
  - Any framing member that has been cut or notched beyond allowances must be reinforced. (R602.6)
  - Attic areas shall be ventilated. A 22 inch by 30 inch minimum access shall be provided. A larger opening may be required when equipment is located in the attic. (R806.1, R807.1, M1305.1.2)
  - All structural members, their size, spans and method of attachment are to be in accordance with the code. Any alternative material not prescribed in the code must be approved by the Building Official. (R301)

ELECTRICAL ROUGH-IN

- A grounding electrode system is required at each structure served. Each electrode specified in section E3608 shall be bonded together to form the grounding electrode system. A minimum of 2 grounding electrodes is now required and shall not be less than 6 feet apart. (E3608, E3608.4)
- Panel box locations must meet clearance (30 inches wide and 36 inches deep by 6'- 6" high) and cannot be located in a bathroom, clothes closet or over the steps of a stairway. (E3405.5)
- Receptacle spacing on walls shall not be more than 12 feet apart, within 6 feet of a door and on any wall over 2 feet in length. (E3901.2.1)
- Kitchen countertop receptacle spacing is basically every 2 feet on center, with one receptacle required in any island or peninsula countertop over 24 inches. (E3901.4)
- Wiring shall be protected from abrasion and from physical damage. (E3802.3.2, Table E3802.1, E3803.1)

- Holes closer than 1 ¼" from edge of member shall be protected with nail guards. (Table E3802.1)
- Smoke and Carbon Monoxide detector wiring must be installed. Smoke Detectors are required inside each sleeping room, immediately outside the sleeping rooms and on each additional story including basements and habitable attics. Carbon Monoxide detectors shall be installed outside of each sleeping area within dwelling units that contain fuel-fired appliances or have attached garages. Where a fuel burning appliance is located within the bedroom or attached bathroom, a carbon monoxide alarm shall be installed within the bedroom. They must be hard wired, interconnected and have battery backup. Refer to manufacture's installation instructions for specific application but in general, they must be located within 12 inches of the ceiling and 3 feet from any source of air movement (returns, registers, ceiling fans, etc.). Note: Smoke Detectors located in the bedrooms are required to be Arc-Fault Protected if supplied by circuits that also serve the bedroom outlets. (R315)
- Panel Box is in place. Service entrance must be run. Wiring must be run to all locations. (R109.1.2)
- Unless the meter base and the service panel are located back-to-back or next to adjacent stud cavity, a four wire system with an exterior service disconnect is required. The sub-panel must isolate neutrals from the grounds. (NEC 230.70 and 230.91)
- A receptacle is required on the front and back of each dwelling unit within 6'-6" of grade and on balconies, decks and porches that are accessible from inside the dwelling. (E3901.7)

PLUMBING ROUGH-IN

- PVC pipe cannot be used for any water distribution inside the building. (Table P2906.5)
- Supply water lines shall be tested under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less not 50 psi. (P2503.7)
- Where piping is installed through holes in plates or studs less than 1 1/4 inches from the edge of the member, shield plates shall protect the pipes. (P2603.2.1)
- Vent terminals min. 6 inches above the roof. Roof boots should be installed. (P3103, P2607.1)
- Vent terminals shall not be within 10 feet horizontally of openings into the building unless it is at least 3 feet higher than the opening. (P3103.5)

GAS ROUGH-IN

- Gas log fireplaces shall have a shut off valve outside the firebox but within 6 feet and in the same room. (G2420.5)
- 2 psi gas lines labeled. Other than steel pipe, exposed piping shall be identified by a yellow label marked "Gas" in black letters and spaced a maximum of 5 feet on center. (G2412.5)
- Water heaters located in the garage must be protected from impact by automobiles (M1307.3.1)
- All appliances located in the garage must be elevated a minimum of 18 inches above the floor. (M1307.3)
- Appliance installation shall conform to the listing and label of their manufacturer's installation instructions. Instructions shall remain with the appliance. (M1307.1)

HVAC ROUGH-IN

- Clothes dryer exhaust shall be roughed-in. Maximum length shall not exceed 35 feet from the dryer location to the wall or roof termination. (State Modification IRC 2018)
- Bathroom exhaust fans must be installed in every bathroom and water closet and duct run to the outdoors. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space. (R303.3, M1501.1, M1505.2)
- (3)Air returns must be installed. Prohibited in kitchens, bathrooms, garages and within 10 feet of a

fueled fired appliance. (M1602.2)

- Condensate and HVAC line sets should be installed and fire-stopped. (R302.11)

INSULATION

- Floors require a minimum R-19
- Walls require a minimum R-13
- Ceiling require a minimum R-30

ELECTRICAL SAFETY

- A grounding electrode system is required at each structure served. Each electrode specified in section E3608 shall be bonded together to form the grounding electrode system. A minimum of 2 grounding electrodes is now required and shall not be less than 6 feet apart. (E3608, E3608.4)
- A minimum two 20-amp circuits are required in the kitchen, one in the laundry and one for the bathrooms. All must be wired with #12 AWG wire size. (E3703
- All Breakers are in place and labeled. Panel Cover is removed.)
- Ground Fault Circuit Interrupters (GFCI) required in all damp locations and in the following: bathrooms, garages, kitchen countertops, outdoors, crawlspaces, laundry rooms, kitchen dishwashers, unfinished basements and sinks. (E3902)
- Are-Fault Circuit-Interrupters (AFCI) required in all branch circuits that supply 120 volt, single-phase, 15 and 20 amp outlets installed (E3902.16)
- Tamper Resistant Outlets are required in all 125 volt 15 and 20 amp receptacles in areas specified in Section E3901.1 (E4002.14)
- All switches, receptacles and junction boxes must have covers on them. Lighting fixtures must have operable bulbs in them. (E4004.1)
- Circuit breakers must be sized to match wires. (E3702.14)
- Disconnects for dishwasher, waste disposal and trash compactors may be a chord and plug. (E4101.3)
- Disconnect for water heater and HVAC shall be at the unit. (E4101.5)
- A switch controlled lighting outlet is required in every habitable room, bath, hallway, stairway, attached garage, storage and appliances in attics or crawl spaces, basements and each exterior grade exit. (E3903)
- “In use covers” are required for outlets located in “wet locations”. (E4002.10)

Final

- Building must be completed and ready for inspection. Warning: Buildings may not be occupied prior to a final inspection being passed and a Certificate of Occupancy has been issued. The Building & Codes department does not inspect cosmetic items, nor do a “punch list”. Once the final inspection has passed, a Certificate of Occupancy will be issued the following business day. (R110.3)