



# **Residential (1, 2 & 3 family) Buildings** **Typical Required Inspections**

(Solon Building Department)  
(Form date December 10, 2010)

## **Site/Lot Line Marking/Trees..... \_\_\_\_\_**

- \_\_\_\_\_ Verification of building location & utilities
- \_\_\_\_\_ Distance to lot lines
- \_\_\_\_\_ Distance to other on-site buildings
- \_\_\_\_\_ Distance to public way and/or setbacks
- \_\_\_\_\_ Distance to easements, etc.
- \_\_\_\_\_ Observe locations of any overhead power line conflicts
- \_\_\_\_\_ Verify site address
- \_\_\_\_\_ Trees – 6” or larger in diameter must be marked and saved where possible.
- \_\_\_\_\_ Visual inspection is required prior to lot clearing
- \_\_\_\_\_ Clearly mark trees with ribbon, compatible paint, etc.
- \_\_\_\_\_ Approved drawings and permit on-site & available

## **Excavation for footings and underground utilities (before concrete placements/pour or excavation backfill)..... \_\_\_\_\_**

- \_\_\_\_\_ Soil bearing capacity verification
- \_\_\_\_\_ Frost depth verifications
- \_\_\_\_\_ Forming: dimensions, depth, height, steps, sizing, cantilevers, setbacks
- \_\_\_\_\_ Steel rebar, reinforcement ties, clearances to forms & earth
- \_\_\_\_\_ Electrical grounding attachment to footing rebar
- \_\_\_\_\_ Interior footing pads, reinforcing, bearing, etc.
- \_\_\_\_\_ Concrete quality check if on site.
- \_\_\_\_\_ Plumbing, Electrical &/or Gas line sleeves & protection

## **Foundations (before concrete placements/pour or excavation backfill)..... \_\_\_\_\_**

- \_\_\_\_\_ Forming: dimensions, depth, height, steps, cantilevers
- \_\_\_\_\_ Foundation connections & relationship to footings, piers, cussions, etc.
- \_\_\_\_\_ Foundation elevation verification
- \_\_\_\_\_ Steel rebar, reinforcing ties, clearances to forms & earth
- \_\_\_\_\_ Concrete quality check if on site
- \_\_\_\_\_ Foundation drainage, drain tile verification (Schedule 35), proper hole locations, gravel base & cover
- \_\_\_\_\_ Storm drain verifications, downspouts, gravel base & cover
- \_\_\_\_\_ Termite protection, solid block top course
- \_\_\_\_\_ Load path verifications, solid block beam & bearing locations
- \_\_\_\_\_ Structural positive attachments, anchor bolt locations, sizes, etc.
- \_\_\_\_\_ Basement window openings, basement egress
- \_\_\_\_\_ Waterproofing/dampproofing
- \_\_\_\_\_ Plumbing, Electrical & Gas line sleeves & protection

## **Lowest floor elevation verification..... \_\_\_\_\_**

- \_\_\_\_\_ Approved construction documents must indicate whether or not the building is to be located in a flood hazard area. If located in flood hazard area – approved documents shall indicate the specified elevation of the lowest floor for verification.



## Typical Required Inspections Residential (1, 2 & 3 family) Buildings (continued)

### **Concrete slab & under-floor:.....**

- \_\_\_\_\_ To be performed after all equipment, pipes, insulation, etc is installed but before concrete is poured or sheathing is installed.
- \_\_\_\_\_ Waterproofing/dampproofing
- \_\_\_\_\_ Underground HVAC, electrical, plumbing work verifications
- \_\_\_\_\_ Vapor barrier (poly), mesh, steel reinforcement placements
- \_\_\_\_\_ Drain tile around habitable areas
- \_\_\_\_\_ Under slab insulation placements, rebar chairs, etc.
- \_\_\_\_\_ Crawl space ventilation, vapor barrier poly, etc.
- \_\_\_\_\_ Gravel fill, compaction, etc.
- \_\_\_\_\_ Expansion, control joints, isolation joints, bond breakers, slope, etc.

### **Framing Inspection - Pre-mechanical system installations.....**

- \_\_\_\_\_ Structural framing complete through roof sheathing, headers & roof sheathing, clips
- \_\_\_\_\_ Load path verifications, ceiling heights
- \_\_\_\_\_ Positive attachment verifications
- \_\_\_\_\_ Materials, assemblies, methods, member sizes, joist spans, locations, nailing, etc. per approved documents
- \_\_\_\_\_ Truss & bracing installation, per Truss shop drawings on-site
- \_\_\_\_\_ I-joist installation verifications per I-joist shop drawings on-site
- \_\_\_\_\_ Bracing wall arrangement verification
- \_\_\_\_\_ Fire blocking/firestopping installations
- \_\_\_\_\_ Manufacturer's installation instructions for pre-fabricated units, chimneys, fireplaces, etc. on-site
- \_\_\_\_\_ Tyvek wrap or moisture barrier installations
- \_\_\_\_\_ Building height verifications

### **Plumbing Under ground, Rough (before drywall), Testing & Final Inspections (typical).....**

- \_\_\_\_\_ Underground sanitary & storm sewer with test
- \_\_\_\_\_ Above ground waste & vent with test, water piping test
- \_\_\_\_\_ Final inspection with an air test, temperature verifications, water hammer arrestors, etc.
- \_\_\_\_\_ Roof drain piping into storm sewer, flow test
- \_\_\_\_\_ Backflow prevention verifications
- \_\_\_\_\_ Frost free hose bibs
- \_\_\_\_\_ Protection plates at wall studs
- \_\_\_\_\_ Drain & vent plumbing isometric drawings on-site
- \_\_\_\_\_ Sleeves through foundation walls, masonry & footings
- \_\_\_\_\_ Specialty plumbing systems, grease traps, interceptors, etc.
- \_\_\_\_\_ Manufacturer's installation instructions for all plumbing equipment & piping method on-site for inspection



## **Typical Required Inspections** **Residential (1, 2 & 3 family) Buildings (continued)**

### **HVAC Underground, Rough (before drywall) & Final Inspections (typical)..... \_\_\_\_\_**

- \_\_\_\_\_ Ductwork, support, hangars, sizes,
- \_\_\_\_\_ Duct insulation, wrap & sealing, jointing
- \_\_\_\_\_ Supply air & return air verifications
- \_\_\_\_\_ Check for proper wiring in ducts and returns
- \_\_\_\_\_ Furnace, AC unit installations
- \_\_\_\_\_ Hydronic heating & tests
- \_\_\_\_\_ Kitchen exhaust, location, termination
- \_\_\_\_\_ Bathroom exhaust, location, termination
- \_\_\_\_\_ Listing verifications
- \_\_\_\_\_ Manufacturer's installation instructions for all HVAC equipment on-site for inspection

### **Electrical Underground, Rough (before drywall) & Final (Typical)..... \_\_\_\_\_**

- \_\_\_\_\_ Underground trench
- \_\_\_\_\_ Temporary service
- \_\_\_\_\_ Permanent service
- \_\_\_\_\_ Waterproof, weatherproof, GFCI's & Arc Fault protection
- \_\_\_\_\_ Romex perpendicular to cold-air returns
- \_\_\_\_\_ One cable per hole or staple
- \_\_\_\_\_ Protection plates
- \_\_\_\_\_ Attic light & switch, exterior door light & switch
- \_\_\_\_\_ Outlet & switch verifications, smoke detection
- \_\_\_\_\_ Grounding provisions.
- \_\_\_\_\_ Listing verifications

### **Gas Line Underground, Rough (before drywall), Testing & Final (Typical).... \_\_\_\_\_**

- \_\_\_\_\_ Underground
- \_\_\_\_\_ Pipe supports, pipe materials, shut-offs, connectors (coated)
- \_\_\_\_\_ Air test at new work piping
- \_\_\_\_\_ Metallic gas line bonding
- \_\_\_\_\_ Sleeves & protection
- \_\_\_\_\_ Manufacturer's installation instructions for all gas equipment & piping method on-site for inspection

### **Framing Inspection Final (after mechanical roughs)..... \_\_\_\_\_**

- \_\_\_\_\_ Structural framing complete through roof sheathing, headers, wall & roof sheathing, clips
- \_\_\_\_\_ Load path verifications & Positive attachment verifications
- \_\_\_\_\_ Materials, assemblies, methods, sizes, spans, location, nailing, etc. per approved documents
- \_\_\_\_\_ Truss & bracing installation, per Truss shop drawings on-site
- \_\_\_\_\_ I-joist installation verifications per I-joist shop drawings on-site
- \_\_\_\_\_ Bracing wall arrangement verification
- \_\_\_\_\_ Fire blocking/firestopping installations
- \_\_\_\_\_ Manufacturer's installation instructions for pre-fabricated units, chimneys, fireplaces, etc. on-site
- \_\_\_\_\_ Tyvek wrap or moisture barrier installations
- \_\_\_\_\_ Attic and/or concealed space access verifications
- \_\_\_\_\_ Window & door installations, safety glazing



## Typical Required Inspections Residential (1, 2 & 3 family) Buildings (continued)

**Fireplace.....**\_\_\_\_\_

- \_\_\_\_\_ Smoke chamber and fire box when at damper height
- \_\_\_\_\_ Clearances from combustibles
- \_\_\_\_\_ Chimney throat, fresh air intake
- \_\_\_\_\_ Pre-fabricated units installed in accordance with manufacturing installation instructions.

**Insulation before drywall covering.....**\_\_\_\_\_

- \_\_\_\_\_ Materials, U & R-values, insulation thickness, depth
- \_\_\_\_\_ Air barrier/infiltration sealing, caulking, putties, weather-stripping
- \_\_\_\_\_ Vapor barrier installation

**Interior.....**\_\_\_\_\_

- \_\_\_\_\_ Tile backer board locations, “green” board installations
- \_\_\_\_\_ Garage/house separation
- \_\_\_\_\_ Jacuzzi tub access
- \_\_\_\_\_ Handrails & guards

**Roofing.....**\_\_\_\_\_

- \_\_\_\_\_ Underlayment – ice & water shield, felt, metal drip edge
- \_\_\_\_\_ Shingle installation
- \_\_\_\_\_ Metal roofing installation
- \_\_\_\_\_ Flashing, penetration flashing, roof to walls
- \_\_\_\_\_ Gutters & downspouts

**Exterior & Exterior envelope materials.....**\_\_\_\_\_

- \_\_\_\_\_ Masonry or brick, ties, flashing, weep holes, expansion
- \_\_\_\_\_ Wood siding installation, “rain screen”
- \_\_\_\_\_ Vinyl siding
- \_\_\_\_\_ Stucco installation, screed

**Final Inspection & Life Safety for Occupancy.....**\_\_\_\_\_

- \_\_\_\_\_ Test smoke detection
  - \_\_\_\_\_ Water temperature
  - \_\_\_\_\_ Handrails, locking
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