BUILDING OFFICIAL DETERMINATION

INSPECTION CHECKLIST

Issue: What does the City of Middleton inspect and require before issuing a certificate of occupancy?

Rule: 2012 IRC R105.8 Responsibility. It shall be the duty of every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical or plumbing systems for which this code is applicable, to comply with this code.

2012 IRC R106.4 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amendment to the construction document.

2012 IRC R109.1 Types of inspections. For onsite construction, from time to time the building official, upon notification from the permit holder or his or her agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code.

2012 IRC R109.1.5 Other inspections. In addition to the called inspections above, the building official may make or require any other inspections to ascertain compliance with this code and other laws enforced by the building official.

2012 IRC R109.3 Inspection requests. It shall be the duty of the permit holder or their agent to notify the building official that such work is ready for inspection. It shall be the duty of the person requesting any inspections required by this code to provide access to and means for inspection of such work.

2012 IRC R109.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.
Application: Every person who performs work on a building, structure or system is responsible to know and follow the construction codes. "Shall" as used in the codes is mandatory. Perfection is not required, but reasonable efforts are expected. In order to minimize the cost of correction, the city desires to notify a contractor as soon as possible if work does not comply with the code.

Contractors desire inspectors to be consistent, reasonable, and use best efforts to create only one notice of violation/correction notice per inspection type. Inspectors desire contractors to follow the code and manufacturer's specifications, where applicable, and to use best efforts to request inspections when work is ready to pass inspection.

Determination:

The following inspections are required in the City of Middleton (Middleton City Code 4-1-3), and inspectors utilize the following checklists, as applicable, before issuing a certificate of occupancy. The building permit fee includes the cost of one inspection for each inspection type. A fee is due to the city prior to re-inspections as a deterrent to requesting inspections before work is ready to pass inspection.

1. Foundation footings (IRC R109.1.1)
2. Underfloor framing - before decking is applied.
3. Shear - exterior and interior brace walls, can be included with framing inspection
4. Exterior Flat Work - call in day of pour for next-day inspection.
5. Plumbing, electrical and mechanical (IRC R109.1.2)
6. Framing - includes truss installation, exhaust vents, stairs, flashing for penetrations, and hose bib locations (IRC R109.1.4, R1091.5.1)
7. Energy - includes insulation, vapor barriers, and baffles
8. Siding - siding, flashing, gaps and caulking
9. Lath - for water resistant barrier, stucco or masonry veneer (IRC R109.1.4)
10. Attic Venting - call in day of shingle installation for next-day inspection
11. Final - includes paint under bottom side panel, and exterior grading (IRC R109.1.6)
FOUNDATION INSPECTION

- Verify setbacks with approved prints
- Verify special piers and footings (sizes and rebar mats as required).
- Verify rebar is installed throughout
- Foundation per job specifications.
- Check on size and depth of footings and
- Block-outs for crawl-throughs.
- Locate ground rod, verify 20'-0 length.
- Attach green sticker to top of ground rod if project is approved.
UNDER-FLOOR FRAMING INSPECTION

• Check method of floor joist support - (pony wall, joist hangers)

• Does the method used match the approved plans?

• IF PONYWALL - treated mud sill nailed min. 48” o/c to footings

• Untreated framing spaced away from concrete.

• Lateral bracing in place for pony walls and interior shear panels between floor joists.

• IF JOIST HANGERS - mud-sill holding joist hangers must be a 2x8 or wider, cut to width of foundation wall.

• Check mud sill for proper anchor bolt placement at ends and field. 3” min and 12” max from ends and 2 bolts min per board.

• Verify special tie down bolts and tie down placement with plans and engineering drawings if any.

• Perimeter vapor barrier from mud sill to below floor joist level.

• Verify cut outs for foundation vents.

• Check crawl vapor barrier in general.

• Check pony wall access holes for size and existence. Verify floor crawl access holes with plans.

• Verify framing and blocking for point loads and brace-wall framing.
SHEAR INSPECTION

- Review type of portal frames called for on the plans and location.
- Check portal frames per engineering specifications provided. Either IRC specs or Engineers drawings.
- Verify location of all brace panels and verify they are properly nailed. See nailing schedule on plans or engineers drawings. 2012 IRC does not permit staples in shear panels (R602.3(3)).
- Check base of shear panel to verify triple 16d nail fasteners between studs as required.
- If trusses have a “heel” or are cantilevered over a shear panel, verify the shear panel has been extended to the roof, or to within 2” of the roof if ventilation is an issue.
- Check plans for lateral blocking specifications between trusses.
- Verify interior shear walls are braced at floors and ceilings per figure(s) R602.10.8(1,2)
FRAMING INSPECTION

- Verify Electrical, Plumbing and Mechanical inspections have been completed and passed.
- Find approved set of prints and check for notations.
- Verify Energy Seal – caulked sills and foamed gaps and holes
- Garage portal frames and tie-downs - nuts and washers in place and/or all nail holes filled with correct nails.
- Straps at portal frame beam to wall and other engineering requirements
- Attic access hole(s)
- Bollards at furnace area (as required) filled with concrete, set in footing?
- Steps into house from garage? Over 2 risers require a landing.
- Stairs and landings- Rise and Run – Landings – Width- Headroom
- Truss ties – H 2.5A or Simpson Orange Screw, or approved equiv.
- Check truss engineering and web bracing.
- Compare plans to shear panels interior and exterior. Verify top and bottom bracing and fastening of interior brace walls. Verify exterior wall brace panel bottom plates are nailed w/ (3) 16d nails between each stud.
- Check air seal (foam and caulking) around interior
- Look for uninsulated framing pockets.
- Verify fire blocking as required.
- Check for extended brace panels at truss heels and cantilevered trusses
• Verify dryer and range vents terminate correctly (distance and location)
• Crawl access hole(s)- location and size 18” x 24” minimum
• Check window and door installations. Sealant bead behind window mounting fin? Properly nailed? Properly flashed?
• Is building wrap correctly applied? Holes? Gaps? Tears? Cuts?
• Does the concrete slope correctly? 2% (1/4” per foot)
• If siding is applied, check gaps at concrete and/or masonry. Verify, if possible, the nailing patterns and type of nails used.
• Check flashing – verify all areas requiring flashing have been addressed and all flashing has been installed correctly and sealed correctly.
• Take special note of the sidewall “kickout” flashing, if any.
• Verify 2” vertical clearance between untreated wood and concrete slab (R317.5)
INSULATION

• Are all the cells filled?

• Are adequate air baffles installed?

• Are “insulation dams” made of permeable material?

• Check small corners and tight spaces for complete fill

• Verify vapor barrier is on warm side of wall only

• Verify batt ceiling insulation is proper R value.

• Check plans for potential special insulation requirements.
LATH

- Is the weep screed set at 1” below the sheathing and the backleg behind the WRB?
- Is the weep screed set at 2” above concrete and 6” above finish soils?
- Are all penetrations sealed to the waterproof barrier?
- Are all penetrations larger than 16 sq. in. separated from the “ground” by “J” channel or equivalent?
- Is the WRB lapped correctly?
- Tears, breaks or gaps in the WRB?
- Is the lath the correct gauge and is it self-flashing?
- Is the lath installed with the correct laps horizontally and vertically?
- Is the lath attached correctly? Correct length of staples, staples only into framing members, staples approx. 7” o/c.
- Are accessories (control joints) attached with wire to the lath? (nailing is not permitted for control joints)
- Are window and door heads flashed correctly?
- Check sidewall “kickouts” for proper flashing function.
- “Pop-outs” are to be adhered to the surface of the “ground” after it has cured. No penetrations of the “ground” are permitted.
INTERIOR SHEAR

- Locate GB shear walls on permit plans
- Verify screw/nail pattern matches plan schedule
- Verify edges are blocked if called for on plans
- Verify nails or screws are the type called for on plans
FINAL

- Check exterior for full width driveway and proper slopes on the concrete.
- Check flashing on siding and roofing.
- Check sealant around windows and doors and other penetrations. Ends of Flashing runs.
- Verify siding is painted on the bottom edges and all wood trim is 2” above concrete slabs and 6” above finish soil grade.
- Verify general soil grading is 5% away from the fdn. for at least 10’, or other provisions have been made for drainage.
- Verify hot water pipe insulation
- Remove all debris and check general crawl space condition
- Verify masonry is sealed properly and mortar is not on contact with siding.
- Check bollard(s) in garage.
- Are Plumbing, Electrical, and Mechanical inspection finals completed?
- Check smoke alarms for function.
- Verify debris removed from crawl space (R408.5).

David Wardell, Building Official  
9 Feb 2018  
Date