

[RICHLAND COUNTY BUILDING DEPARTMENT](#)

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Commercial / Non-Residential Inspection Guide and List of Required Inspections

PLEASE READ ALL THE CONDITIONS AND INFORMATION IN THE CERTIFICATE OF PLAN APPROVAL PRIOR TO COMMENCING WORK. All approved construction documents, Certificates of Plan Approval, and On-Site Inspection Records shall be posted at the construction site and available during inspections.

How to Schedule an Inspection

- It is the responsibility of the Owner or the Owner's Agent to request required inspections for all projects.
- Call 419-774-5517 to request an inspection. Provide the job address, the application number, and the type of inspection you are requesting. Failure to have both the address and the permit number may inhibit our ability to schedule the inspection.
- Provide any specific job site access instructions at the time of scheduling such as key location, access code, etc.
- Inspections may be requested from one day to five working days in advance. Same day inspections may be available, subject to inspector availability.
- When scheduling an inspection, a 30-minute call ahead may be requested. You are encouraged to call the morning of the scheduled inspection after 8:30 AM and clerical staff can provide an approximate 2-hour time window for the inspection. Note the first inspections in the morning may occur as early as 8:30 AM. If that time range is not satisfactory, you may cancel your inspection and reschedule it for another day.
- All approved Construction documents (plans, CPA's, site log) must be on the job site for ALL inspections.

How to Prepare for Inspections

- Check your work before scheduling an inspection to make sure all work to be inspected is completed. Failure to do so may result in non-compliance and a re-inspection fee being charged.
- Inspection results will be recorded on the site-inspection sign off log that is provided with the Certificate of Plan Approval (CPA). The site log and CPA are given to the applicant at the time of document pickup or transmittal from our office.
- All work requires inspection prior to concealing. Work covered up without inspection will either have to be uncovered, or an alternative way of determining compliance will be required and a re-inspection fee will be assessed.
- Final Inspections need to be requested and completed prior to any occupancy of the structure. Failure to request a final inspection on any portion of your job may result in an expired application without approval to occupy or use. Reactivating expired applications may require additional fees and plan reviews. If you build differently than what's shown on the plans, you will need to submit plan change documents to our office for review and approval, and will need to have approved plan change drawings on the jobsite for your inspection.
- If pre-engineered trusses are damaged, drilled, cut or notched, you will need drawings sealed by an engineer showing how they are to be repaired.

List of Required Inspections

Building/Structural

Footing /Lot Line Markers.

- Lot line markers are installed and properly identified (new construction and additions only).
- Prior to placing concrete, after footing forms and/or grade stakes are in place.
- Required for all structure and foundation retaining walls, exterior frost slabs, ground/pole/pylon sign foundations, light pole bases/foundations.
- Required reinforcing is properly installed, splices are of required minimum length and complete, and reinforcing is properly supported on approved chairs or concrete bricks.
- Special Inspections where required are completed.

Foundation / below grade Concrete/Masonry Wall Inspection.

- For buildings/structures with a basement or crawl space.
- After foundation walls are completed.
- Waterproofing/Damproofing and foundation drainage tiles are installed prior to backfilling; foundation anchor bolts, core reinforcing, and cores poured/slushed.
- Foundation drainage installed and verification of connection to sump system, storm sewer system, or daylight outlet.

Above grade masonry wall inspection.

- During laying of block for observation of required reinforcement, filling of block cores, placement of lintels, and installation of bond beams.

Concrete / Poured Wall / Retaining Wall Inspection.

- After forms and reinforcing are completed and in-place.
- Prior to placement of concrete.

Concrete Slab / Under floor.

- After clean granular fill has been placed. Vapor barrier and perimeter insulation installed.
- All reinforcing and/or wire mesh is installed and properly supported with approved chairs or concrete bricks.
- Requested after completion of underground plumbing and underground electrical inspections.

Lowest floor elevation.

- The elevation certification required in section 1612.5 shall be submitted to the building official.
- Field inspection shall be made to verify elevation information.

Structural Framing.

- After complete of rough electrical, mechanical, and plumbing inspections.
- After framing is complete but before placement of insulation, drywall, or other wall coverings.
- Exterior wall bracing will be inspected as well.

Above Ceiling/Ceiling Grid Inspection.

- After completion of above ceiling mechanical, electrical, plumbing, fire alarm wiring, and sprinkler piping inspections. Ceiling grid is installed but prior to installation of ceiling tiles.
- All fire rated penetrations are completed.
- Mechanical and Electrical above ceiling and sprinkler rough piping inspections may be performed at the same time but all inspections (structural, electrical, mechanical, sprinkler) must be requested at the same time.

Insulation/Energy Efficiency.

- After insulation has been placed, prior to the installation of drywall and wall/ceiling coverings.
- Infiltration protection method: putties; weather-stripping; door & window specifications and manufacturer's instructions; ductwork wrap and sealing; infiltration wraps.
- Equipment efficiency: furnace/AC unit; water heater; humidifier; dehumidifier; etc. manufacturer's plate to match spec & installation in accordance with manufacturer's installation instruction (check against listing).
- Verification of any ductwork and/or blower door testing that is required to be completed prior to issuance of the Certificate of Occupancy.
- A copy of the energy code report in the approved plans will be used to conduct the inspection.

Fire Rated Wall/Ceiling/Penetrations.

- Fire rated walls, floors, ceilings, and roofs.
- After the installation of drywall and fire rated joint systems but prior to any plastering, mudding, and taping.
- Protection of joints, penetrations, and top of wall terminations shall not be concealed from view until the inspection has been completed.
- Verify that rated opening protectives are provided where required.

Special Inspections.

- Special Inspections required by OBC Chapter 17 shall be performed throughout the project by special inspectors in accordance with the approved Statement of Special Inspections.
- Special Inspectors shall keep an on-site record of inspections performed in accordance with the Statement of Special Inspections.
- Any discrepancies or deviations shall be clearly noted. Correspondence/notification to/from design professional shall be legible and provided. Corrections shall be clearly noted and documented.
- Special Inspections are required **IN ADDITION TO** the inspections contained in this document and as required by OBC Section 108.

Final Building/Structural/Site Inspection.

- All final fire, mechanical, electrical, plumbing, fire alarm, automatic sprinkler, and sign inspections shall be completed first.
- Provide copies of life safety system acceptance testing
- Provide copies of all testing and reporting documentation.
- Energy certificate shall be posted at the electrical panel.
- All building and site work shall be completed.
- The site shall be stabilized (seeding/mulching) and erosion/sediment controls left in place for areas where permanent vegetation has not been established.
- All exterior building and ground signage shall be installed and inspections completed.
- Final mechanical, sign, and sprinkler inspections may be performed at the same time but all inspections must be requested at the same time.

Mechanical

Mechanical Rough Ductwork and gas piping / Gas piping pressure test.

- After ductwork is installed and prior to insulation and/or concealing.
- All duct joints shall be sealed.
- Gas piping shall be installed and properly supported.
- Gas piping pressure testing shall be performed by contractor and witnessed by inspector. A gas piping affidavit may be submitted in lieu of inspector being present for test; obtain permission from inspector to submit affidavit.
- Penetrations of fire rated assemblies (including fire and smoke dampers) installed and completed.

Mechanical Piping Inspections

- Performed for Building Services piping not inspected by plumbing inspector.
- Includes Steam heating, hydronic piping, chilled water, condenser/cooling tower water, and refrigerant piping systems.
- Verify proper piping materials, support, fittings, welding/brazing procedures, joints, and piping sizes.
- Verify piping penetrations of fire rated assemblies.
- Verify piping testing procedures have been completed. Testing may be performed during a separate inspection depending on the configuration of the piping system(s).
- Piping should not be covered, concealed, or insulated until after this inspection has been completed.
- May be performed at the same time as Mechanical Rough Inspection.

Mechanical Above Ceiling.

- After ceiling grid is installed and prior to installation of ceiling tiles.
- Diffusers and Return Air fittings installed in ceiling grid. Duct connectors installed and sealed.
- This is similar to a Mechanical Rough Ductwork Inspection.

Mechanical Kitchen Exhaust Hood Ductwork.

- Exhaust ductwork and terminations installed.
- Light test performed in presence of inspector in accordance with mechanical code.
- Hoods installed and properly supported.
- Hoods provided with proper separation from combustible materials.

Mechanical Kitchen Hood Final/Performance Test.

- Exhaust ductwork wrapped and/or insulated.
- Exhaust and makeup air equipment installed and properly working.
- Mechanical contractor tests hood function in presence of inspector; interconnection with and shutdown of appliances, interconnection with fire suppression system where installed/provided, verification of supply/return/makeup/exhaust air rates per approved plans.
- Report submitted to inspector at completion of inspection.
- Coordinate inspection with Fire Suppression inspection and acceptance test.

Mechanical Final.

- Test mechanical equipment smoke detection devices in the presence of inspector.
- All mechanical appliances installed and provided with fuel/power source.
- All ductwork and fittings installed and complete.
- All gas piping connected to appliances.
- All appliance vents installed and properly terminated.
- All exhaust systems installed, functioning, and properly terminated.
- Condensate drains installed to proper location.
- Ignition sources elevated in garage areas.
- Physical protection of mechanical appliances in garage or adjacent to vehicle parking/movement spaces.
- Exterior mechanical equipment on approved bases and level.
- Required Supply/outdoor air provided.
- Terminations of exhaust equipment in proper location and installed with proper termination fittings.
- Mechanical equipment access and service space provided; roof/platform access provided where required.
- All manufacturer's installation instructions posted on job site for inspection and Owner's records.
- Mechanical equipment balanced and reports provided where required by Mechanical Code and/or approved plans/CPA. Fire dampers and smoke vents provided with access and labeling.
- Smoke and heat vents installed and tested; test reports provided to inspector.
- Mechanical vent connectors and chimney connections installed.
- Proper clearance to combustibles.
- Chimney vent termination installed with required clearances.

Electrical**Service/Temp Service.**

- Electrical service equipment for overhead or underground services.
- Conductors from point of utility connection to all service equipment, meter bases, and service disconnecting means.
- Grounding electrode conductors installed.
- Conductor protection and working clearance/working space.
- Available Fault current and Arc-Flash warnings posted

Underground/trench.

- Underground trench inspection for exterior electrical fixtures/equipment and electrical services.
- Inspection is made after conduits, sleeves, or other devices are installed prior to backfilling.
- Includes electrical site lighting foundations.

Electrical Underslab.

- Conduits and other electrical equipment installed under concrete slabs.
- Prior to placing of concrete.

Rough wiring.

- To be made prior the building framing rough-in inspection and after all service cable, branch circuit distribution wiring, and low voltage wiring to be concealed is in place and stubbed into panel boxes set and secured to the structure.
- Outlet, junction, and fixture boxes are in place and secured.
- Required conduit is in place and fastened properly.
- Wiring is protected from physical damage; panel boards and switching gear servicing the area are set and secured to the structure with service and distribution wiring stubbed into their approved enclosures.
- Disconnects are in place and secured
- Bonding and grounding rough wiring is stubbed out near its termination point
- Before any wall or ceiling membranes are installed. Do not cover anything prior to inspection.

Electrical above ceiling.

- Similar to rough building wiring where an acoustical ceiling is installed.
- This inspection is performed after the ceiling grid and electrical wiring/devices/equipment is installed prior to the installation of ceiling tiles.

Electrical final.

- To be made prior to the final building/structural inspection.
- All utilities have been connected and all installed electrical systems are in full operation.
- All equipment, motors, appliances, fixtures, controls, guards, and other related systems have been labeled, tested, and balanced.
- Completed electrical installation is ready for its intended use.

Exterior Signage

Sign Foundation Inspection.

- Inspect sign foundation location with respect to Right-of-Way, property line, sight distance, utility clearance, and obstructions.
- Inspect foundation depth, dimensions, posts, and reinforcing steel.

Sign Structural Connection.

- Inspect wall configuration and attachment of sign components/assembly to wall per approved construction documents.
- Inspect pole/pylon sign components, fasteners, welds, and connections.
- Inspect sign cabinet construction for proper connection to wall, pole, framing, etc.
- Inspect ground sign cabinet/framing connection to foundation or support structure.

Sign Underground and Electrical Connection.

- Inspect underground conduit and conductors for burial depth, wiring methods, and material specifications.
- Inspect wiring methods, sign disconnect location, proper bonding/grounding of sign components.

Sign Final inspection.

- Sign faces installed.
- Electric/Electronic components of sign installed and working.
- Inspect overall sign dimensions and location for conformance with approved construction documents.
- Verify identification of sign installed per OBC Appendix H Section 104.1.

Fire Alarm

Fire Alarm Rough Wiring.

- Similar to building rough wiring to observe wiring and boxes for equipment/fixture placement

Final Fire Alarm Inspection and Acceptance Test.

- Performed by both Building and Fire Departments; not necessarily at same time.
- Building Department will verify device placement in accordance with approved plans.
- Fire Department will witness acceptance testing to verify proper system operation and supervision.
- NFPA 72 Fire Alarm System Record of Completion provided by contractor. Signature by Fire Department on AHJ line. Hard copy of report shall be provided to the Fire Department for signature at time of acceptance.

Automatic Sprinkler / Standpipe

Rough above ground piping.

- Performed by Building Department
- Verify piping materials and piping support.
- Verify head placement

Underground piping.

- Performed by the Building Department
- Verify piping materials, backfill/bedding materials, proper depth, valve configuration, and joints/thrust blocking.
- Water tap inspection is the responsibility of the water purveyor.

Above Ground and Underground hydrostatic test and flushing.

- Witnessed by the Fire Department
- Fire protection contractor shall provide and complete the appropriate form for signature by the Fire Department.

Final Automatic Sprinkler.

- Performed by Building Department
- Verify head type and placement.
- Verify signage is provided on all valves and FDC's.
- Verify ceiling construction and escutcheon plates installed for pendant heads
- Check for obstructions to sprinkler heads and discharge pattern.
- Verify hydraulic data placards are current and provided for all risers.
- Verify supervision of system.
- Copy of Acceptance test for above and below ground piping witnessed by the Fire Department

Alt. Fire Suppression

Final Suppression Inspection and Acceptance Test.

- Performed by both Building and Fire Departments; not necessarily at same time.
- Building department will verify piping configuration, nozzle type and placement, tank/agent quantity and location, connection to building fire alarm if present (otherwise local alarm only), manual pull station location, fire extinguisher placement and type.
- Fire Department will witness acceptance testing to verify proper system operation and supervision.
- Hard copy of installer's report shall be provided at time of inspection completion.

Roofing/Re-roofing

Roof decking/structural framing.

- Structural framing inspection where structural repairs to carrying members (rafters, trusses, bar joists, etc.) or decking (plywood/OSB, metal, etc.) were performed.

Roofing Underlayment.

- A roof insulation (where required or installed), underlayment, flashing, and decking inspection.
- This inspection needs to be completed prior to the installation of any roof recovering materials (shingles, membrane, etc.) are installed.

Roofing Final Inspection.

- This inspection needs to be performed once all work has been completed.
- All roofing materials, ventilation, flashings, roof drainage (gutters, scuppers, etc.) are installed.
- Other systems as affected such as mechanical or electrical have been re-installed.

Submission of final testing and reporting

- A list of final reporting and testing documents is provided in the Certificate of Plan Approval.
- Provide copies of all documentation at final building inspection.

Inspections by Other Agencies

Richland Public Health

- Plumbing Inspections and Medical Gas plan review, plan approval, and related inspections. Call 419-774-4520.

Life Safety Systems acceptance testing.

- Performed by the local Fire Department Inspector and/or State Fire Marshal in accordance with Ohio Fire Code Section 105.3.3.1.
- Witness of Acceptance testing is performed by the Fire Department.
- Fire protection contractor shall provide and complete the appropriate form for signature by the Fire Department.
- Automatic Sprinkler, Standpipe, Fire Alarm/CO, Alternative Fire Suppression are performed during construction of such systems.
- Copies of all acceptance test documentation shall be provided at the Final Building Inspection.
- See the explanation for each inspection above for more detail.

Final Fire Inspection

- Performed by the local Fire Department Inspector and/or State Fire Marshal in accordance with Ohio Fire Code Section 105.3.3.2.
- Performed for New Construction and Additions, Interior Alterations, and Change of Occupancies.
- Completed prior to Final Building Inspection.
- Verify exit signs, emergency lighting, fire extinguishers, apparatus access, life safety plans, knox box, exits and egress routes.
- Verify existing life safety systems have been maintained.