

City of Westerville

Guide to Commercial Inspections

FOOTINGS - After the excavation, with the form work and any required reinforcing steel in place. All footings shall have loose soil removed, reinforcing steel on approved chairs with 3" clearance to the any adjacent earth. Double forms shall be used or the concrete shall be cast against earth with shear sides the depth of the footing. Any reinforcing, including vertical wall or pier dowels shall be installed (wet setting of reinforcing is prohibited) This inspection is required prior to placement of concrete. **An independent testing agency cannot give an approval in lieu of a City of Westerville Inspector.** An independent testing agency is needed for verification of soil bearing capacities and concrete testing work in accordance with section 1905 of the OBC. **Set times are given for footing inspections.**

FOUNDATION - Before placement of back-fill and before installation of any concrete slab or framing member. This inspection is sometimes done in phases depending on the particular project. A below grade foundation inspection would encompass; below grade masonry work, any required insulation, anchor bolts, waterproofing/dampproofing or any reinforcing details required by the approved plans. Once a below grade foundation approval is obtained backfilling and slab prep can begin. If needed, above grade foundation **inspections occur at each grout lift to verify any vertical reinforcing** and/or bond beams or special details required by the approved plans. **Poured concrete foundation walls and piers require inspections** prior to pouring, again all required reinforcing steel and form work shall be in place. **Set times are only given for poured concrete walls and piers.**

UNDERGROUND PLUMBING - After the installation of piping and prior to backfilling.

UNDERGROUND SPRINKLER SYSTEM PIPING – Typical inspections include a visual inspection of the private fire service main, underground flush and flow, and hydrostatic inspection(s). When requesting these inspections, it is recommended that you call **two days in advance of the desired date of the inspection.** **A mutually agreeable time and date between the Contractor and the City will be given for this inspection.** **The contractor shall have the material and test certificate completed and signed by the required representatives upon completion of the inspection.**

SLAB - After the approvals of the below grade foundation, underground plumbing and electric inspections. After the installation of the base material, vapor barrier, wire welded fabric (if required), and any required reinforcing, keyways, or other details shown on the approved drawings. Conduits, pipes, and sleeves of any material not harmful to concrete and within the limitations of ACI 318, Section 6.3 are permitted to be embedded in the concrete with the *approval of the registered design professional*. **Set times are given for slab inspections.**

STRUCTURAL STEEL - The contractor/owner shall hire an approved testing agency to provide special inspections of the structural steel construction in accordance with section 1704 of the OBC. The results of the special inspections shall be provided to the building department when complete and prior to additional loading and/or construction supported by the structural steel, and prior to the framing inspection and drywall.

SPRAY APPLIED FIREPROOFING - Fireproofing shall be inspected by the City of Westerville. **UL design numbers and methods to be used in this process shall be submitted in the approved plans and made available to the inspector performing the inspection.** Additionally, the contractor shall hire an approved testing agency to perform testing of the thickness, density, and bond strength in accordance with section 1704.11 of the OBC. The results of the inspection by the approved testing agency shall be submitted to the building department when complete. Spray applied fireproofing shall be inspected and approved prior to concealment.

ROUGH ELECTRIC - Prior to the concealment of the work and prior to the framing inspection.

ROUGH PLUMBING - Prior to the concealment of the work and prior to the framing inspection. The air test shall be on all plumbing (15) fifteen minutes before the start of the inspection.

ROUGH HVAC - Prior to the concealment of the work and prior to the framing inspection. In cases where the hvac work is entirely above an acoustical ceiling, the rough hvac inspection can be performed after the framing inspection. **Please note; all hvac work must be installed per the approved plans, if changes in the duct sizes and layout have occurred, revisions must be submitted and approved prior to the inspection.**

GAS PIPING – The **Underground Inspection** shall be made after the trenches or ditches are excavated and bedded, after the piping is installed, and prior to the backfill. The **Rough-In Inspection** shall be made in conjunction prior to the framing inspection and before concealment of the piping. The **Pressure Test Inspection** shall be performed before the final hvac inspection. **Set times will be given for the gas piping pressure test inspection.**

SHAFT WALL FRAMING - The inspection shall occur **after three sides of the shaft are installed, after the approval of the mechanical work inside the shaft**, and before the installation of the outer layers of drywall. Properly seal any penetrations in the shaft liner prior to the inspection. Once an approval is given for the mechanical work inside the shaft and an approval of the framing, the Contractor may close up the shaft by installing the fourth side.

KITCHEN EXHAUST HOODS - Commercial kitchen exhaust hoods shall have a rough-in inspection to check the hood, exhaust duct, support, clearances, and make up air duct. The rough-in inspection should occur prior to the framing inspection. If a clearance reduction system is used such as a duct wrap, it will require an inspection also. (Please note drywall is considered a combustible material and proper clearances must be adhered to.) The joints and seams of a grease duct (type I) shall be liquid tight, the contractor shall demonstrate compliance through some form of testing. A final inspection / acceptance test is required to check the performance of the hood system and the fire extinguishing system. The contractor installing the hood system shall be present at all inspections. **Set times will be given for the acceptance test on kitchen exhaust hoods.**

FRAMING - After the approval(s) of the rough plumbing, electrical, and hvac, **prior to the installation of insulation or drywall, and after the building is weather tight.** If engineered products are being used such as floor and roof trusses, the engineered drawings shall be submitted and approved prior to this inspection. In an effort to use our personnel in an efficient manner, partial framing inspections will only be given to large projects (over 15,000 square feet).

INSULATION - After the approval of the framing inspection and **after the building is weather tight** (windows, doors, and exterior siding & roofing must be substantially complete). Model energy calculations for compliance with ASHRAE 90.1 shall be submitted and approved prior to this inspection.

LOW VOLTAGE - Low voltage wiring shall be inspected prior to concealment in walls, or prior to the installation of ceiling tile in above ceiling spaces. Penetrations in rated walls or assemblies shall be performed in accordance with section 712 of the OBC.

ABOVE GROUND SPRINKLER SYSTEM PIPING – When scheduling a hydrostatic inspection, it is recommended that you call **two days in advance of the desired date of the inspection.** A mutually agreeable time and date between the Contractor and the City will be given for this inspection. Acceptance testing will occur at the occupancy inspection (life safety). **The Contractor shall complete and submit the Material and Test Certificate(s) in accordance with NFPA 13 upon completion of the inspection.**

FIRE ALARM - Wiring, conduit, boxes, and torque on screw terminals are inspected prior to concealment as a rough in inspection. Visual inspection, testing of initiating devices, and the acceptance testing are performed at the occupancy inspection (life safety). The contractor shall supply a record of completion document in accordance with NFPA 72.

ABOVE CEILING HVAC - This inspection occurs prior to the installation of ceiling tile. Connections of branch lines to diffusers and return air grilles are inspected.

ABOVE CEILING ELECTRICAL - Prior to the installation of ceiling tile and **before the above ceiling structural inspection.**

ABOVE CEILING STRUCTURAL - Prior to the installation of ceiling tile and **after the approvals of rough hvac / above ceiling hvac, above ceiling electrical, and sprinkler** (if required) **inspections.** Some of the common items inspected are; to ensure the integrity of fire rated walls and penetrations in fire rated walls are installed properly, support of the acoustical grid ceiling, and spray applied fireproofing is still intact.

FINAL ELECTRIC - After the installation of electrical devices/fixtures and prior to the occupancy inspection.

FINAL PLUMBING - After the installation of plumbing devices/fixtures and prior to the occupancy inspection.

FINAL HVAC – This inspection shall be performed prior to the occupancy inspection (On small projects the Final Hvac can be performed with the Occupancy Inspection). The contractor shall furnish personnel to test/trip fire dampers (if required) at this time. Please note dampers shall be accessible, be permanently identified. Additionally, smoke detectors in return air systems shall be tested.

FINAL LANDSCAPING - This inspection shall be scheduled (5) working days prior to the Occupancy inspection. This inspection will examine all exterior site elements with the exception of signage. Signage requires separate permits. Site landscaping materials will be inspected for size, species, number, and location. All plantings, bedding, sod, and mulching shall be place at the time of this inspection. Additionally driveway and parking lot paving, sidewalks, bike paths, and striping shall be inspected and must be complete. Other items exterior items such as site lighting and dumpster enclosures will be inspected for consistency with the approved plans. This inspection is conducted by the City Zoning Staff. Zoning approval is required for occupancy. (Section 1107.02)

FINAL GRADING/ENGINEERING – This inspection shall be scheduled and performed as soon as possible once all site work has been completed and prior to the Life-Safety / Occupancy inspection. A complete set of record, or as-built, site plans shall be submitted to the Westerville Construction Coordinator for review and approval prior to obtaining occupancy. These plans shall be certified by the design engineer and shall include all field changes which occurred during the construction. These plans shall confirm all elevations associated with the construction of the sanitary sewer, storm sewer and water distribution systems, and that all grades are within 0.1 foot of the approved plan grade elevations. The Engineering Division will perform an inspection of the site to ensure the record plans accurately reflect what was constructed. This inspection will be completed within three (3) days from the date it is scheduled. A one year maintenance bond, totaling 3% of the cost of all public improvements, shall be provided prior to final Engineering approval being granted. Please contact the Westerville Construction Coordinator at 901.6674 for further information or questions regarding the review and approval of the Engineering Division's record plans.

OCCUPANCY INSPECTION (Life Safety) - This inspection can be scheduled after the approvals of all of the above inspections. When scheduling an Occupancy Inspection it is recommended that you call **three days in advance of the desired date of the inspection. Set dates and times will be given for this inspection.** Please note; large construction projects will require more than one inspection, often large projects will have an inspection each day for a week (four hours a day) to complete the occupancy inspection. The contractor shall furnish the necessary personnel to assist in this inspection.

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