

## COMMERCIAL INSPECTION

### ITEMS INSPECTED DURING “WALK-THROUGH” PORTION OF THE INSPECTION

#### **Roof**

- The roof covering
- For presence of exposed membrane
- Slopes
- For evidence of significant ponding
- The gutters
- The downspouts
- The vents, flashings, skylights, chimney and other roof penetrations
- The general structure of the roof from the readily accessible panels, doors or stairs
- For the need for repairs

#### **Exterior**

- The siding, flashing and trim
- All exterior doors, decks, stoops, steps, stairs, porches, railings, eaves, soffits and fascias
- And report as in need of repair any safety issues regarding intermediate balusters, spindles, or rails for steps, stairways, balconies, and railings
- A representative number of windows
- The vegetation, surface drainage and retaining walls when these are likely to adversely affect the structure
- The exterior for accessibility barriers
- The storm water drainage system
- The general topography
- The parking areas
- The sidewalks
- Exterior lighting
- The landscaping
- And determine that a 3-foot clear space exists around the circumference of fire hydrants
- And describe the exterior wall covering

#### **Wood decks and balconies**

- With naked eye, for deck and balcony members that are noticeably out of level or out of plumb
- For visible decay
- For paint failure and buckling
- For nail pullout (nail pop)
- For fastener rust, iron stain, and corrosion
- And verify that flashing was installed on the deck side of the ledger board
- For vertical members (posts) that have exposed end grains
- For obvious trip hazards
- For non-graspable handrail
- Railings for height less than the 36 inch minimum\*
- Guardrails and infill for openings that exceed the 4 inch maximum\*
- Open tread stairs for openings that exceed the 4 and 3/8 inch maximum\*

- Triangular area between guardrails and stairways for openings that exceed the 6 inch maximum\*
- Built-up and multi-ply beam spans for butt joints
- For notches in the middle third of solid-sawn wood spans
- For large splits longer than the depths of their solid-sawn wood members
- For building egresses blocked, covered, or hindered by deck construction
- For the possibility of wetting from gutters, downspouts, or sprinklers

\*See [www.nachi.org/stairways.htm](http://www.nachi.org/stairways.htm) for formal standards (compliance verification in entirety not required)

## **Basement, foundation and crawlspace**

- A. The basement
- The foundation
- The crawlspace
- The visible structural components
- And report on the location of under-floor access openings
- And report any present conditions or clear indications of active water penetration observed by the inspector
- For wood in contact or near soil
- And report any general indications of foundation movement that are observed by the inspector, such as but not limited to sheetrock cracks, brick cracks, out-of-square door frames or floor slopes
- And report on any cutting, notching and boring of framing members which may present a structural or safety concern

## **Heating and ventilation**

- Multiple gas meter installations, such as a building with multiple tenant spaces, and verify that each meter is clearly and permanently identified with the respective space supplied
- The heating systems using normal operating controls and describe the energy source and heating method
- And report as in need of repair heating systems which do not operate
- And report if the heating systems are deemed inaccessible
- And verify that a permanent means of access with permanent ladders and/or catwalks is present for equipment and appliances on roofs higher than 16 feet
- And verify the presence of level service platforms for appliances on roofs with a 25 percent slope or greater
- And verify that a luminaire and receptacle outlet are provided at or near the appliance
- And verify that the system piping appears to be sloped to permit the system to be drained
- For connectors, tubing and piping that might be installed in a way that exposes them to physical damage
- Wood framing for cutting, notching and boring that might cause a structural or safety issue
- Pipe penetrations in concrete and masonry building elements to verify that they are sleeved
- Exposed gas piping for identification by a yellow label marked "Gas" in black letters occurring at intervals of 5 feet or less
- And determine if any appliances or equipment with ignition sources are located in public, private, repair or parking garages or fuel-dispensing facilities
- And verify that fuel-fired appliances are not located in or obtain combustion air from sleeping rooms, bathrooms, storage closets or surgical rooms
- For the presence of exhaust systems in occupied areas where there is a likelihood of excess heat, odors, fumes, spray, gas, noxious gases or smoke

- And verify that outdoor air intake openings are located at least 10 feet from any hazardous or noxious contaminant sources such as vents, chimneys, plumbing vents, streets, alleys, parking lots or loading docks
- Outdoor exhaust outlets for the likelihood that they may cause a public nuisance or fire hazard due to smoke, grease, gases, vapors or odors
- For the potential of flooding and evidence of past flooding that could cause mold in ductwork or plenums
- Condensate drains

## **Cooling**

- Multiple air conditioning compressor installations, such as a building with multiple tenant spaces, and verify that each compressor is clearly and permanently identified with the respective space supplied
- The central cooling equipment using normal operating controls
- And verify that a luminaire and receptacle outlet are provided at or near the appliance
- And verify that a permanent means of access with permanent ladders and/or catwalks is present for equipment and appliances on roofs higher than 16 feet.
- And verify the presence of level service platforms for appliances on roofs with a 25 percent slope or greater
- Wood framing for cutting, notching and boring that might cause a structural or safety issue
- Pipe penetrations in concrete and masonry building elements to verify that they are sleeved
- Piping support
- For connectors, tubing and piping that might be installed in a way that exposes them to physical damage
- For the potential of flooding and evidence of past flooding that could cause mold in ductwork or plenums
- Condensate drains

## **Plumbing**

- And verify the presence of and identify the location of the main water shutoff valve to each building
- And verify the presence of a backflow prevention device if, in the inspector's opinion, a cross connection could occur between water distribution system and nonpotable water or private source
- The water heating equipment, including combustion air, venting, connections, energy sources, seismic bracing, and verify the presence or absence of temperature-pressure relief valves and/or Watts 210 valves
- And flush a representative number of toilets
- And run water in a representative number of sinks, tubs, and showers
- And verify that hinged shower doors open outward from the shower and have safety glass conformance stickers or indicators
- The interior water supply including a representative number of fixtures and faucets
- The drain, waste and vent systems, including a representative number of fixtures
- And describe any visible fuel storage systems
- The drainage sump pumps and test pumps with accessible floats
- And describe the water supply, drain, waste and main fuel shut-off valves, as well as the location of the water main and main fuel shut-off valves
- And determine if the water supply is public or private
- The water supply by viewing the functional flow in several fixtures operated simultaneously and report any deficiencies as in need of repair

- And report as in need of repair deficiencies in installation and identification of hot and cold faucets
- And report as in need of repair mechanical drain-stops that are missing or do not operate if installed in sinks, lavatories and tubs
- And report as in need of repair commodes that have cracks in the ceramic material, are improperly mounted on the floor, leak, or have tank components which do not operate
- Piping support

## **Electrical**

- The service drop/lateral
- The meter socket enclosures
- The service entrance conductors and report on any noted conductor insulation or cable sheath deterioration
- The means for disconnecting the service main
- The service entrance equipment and report on any noted physical damage, overheating, or corrosion
- And determine the rating of the service amperage
- Panelboards and overcurrent devices and report on any noted physical damage, overheating, corrosion, or lack of accessibility or working space (minimum 30 inches wide, 36 inches deep, 78 inches high in front of panel) that would hamper safe operation, maintenance or inspection
- And report on any unused circuit breaker panel openings that are not filled
- And report on absent or poor labeling
- The service grounding and bonding
- A representative number of switches, receptacles, lighting fixtures and AFCI protected receptacles
- Although a visual inspection, the removal of faceplates or other covers or luminaires (fixtures) to identify suspected hazards is permitted
- And report on any noted missing or damaged faceplates or box covers
- And report on any noted open junction boxes or open wiring splices
- And report on any noted switches and receptacles that are painted
- And test a representative sample of Ground Fault Circuit Interrupter (GFCI) devices and GFCI circuit breakers observed and deemed to be GFCI's during the inspection using a GFCI tester
- And report the presence of solid conductor aluminum branch circuit wiring if readily visible
- And report on any tested GFCI receptacles in which power was not present, polarity is incorrect, the cover is not in place, the ground fault circuit interrupter devices are not installed properly or do not operate properly, any evidence of arcing or excessive heat, or where the receptacle is not grounded or is not secured to the wall
- And report the absence of smoke detectors
- And report on the presence of flexible cords being improperly used as substitutes for the fixed wiring of a structure or running through walls, ceilings, floors, doorways, windows, or under carpets

## **Fireplaces**

- Fireplaces, and open and close the damper doors if readily accessible and operable
- Hearth extensions and other permanently installed components
- And report as in need of repair deficiencies in the lintel, hearth and material surrounding the fireplace, including clearance from combustible materials

## **Attic ventilation and insulation**

- The insulation in unfinished spaces
- The ventilation of attic spaces
- Mechanical ventilation systems

- And report on the general absence or lack of insulation

### **Doors, windows and interior**

- Open and close a representative number of doors and windows
- Inspect the walls, ceilings, steps, stairways, and railings
- Inspect garage doors and garage door openers
- Inspect interior steps, stairs, and railings
- Inspect all loading docks
- Ride all elevators and escalators
- And report as in need of repair any windows that are obviously fogged or display other evidence of broken seals

### **Life-safety**

- Inspect fire access roads and report on any obstructions or overhead wires lower than 13 feet 6 inches
- Inspect the address or street number to determine that it is visible from the street with numbers in contrast to their background
- Inspect and determine that a 3-foot clear space exists around the circumference of fire hydrants
- Verify that hinged shower doors open outward from the shower and have safety glass conformance stickers or indicators
- Inspect to determine that the storage of flammable and combustible materials are orderly, separated from heaters by distance or shielding so that ignition cannot occur, and not stored in exits, boiler rooms, mechanical rooms, or electrical equipment rooms
- Inspect to determine that a "No Smoking" sign is posted in areas where flammable or combustible material is stored, dispensed, or used
- Inspect for the presence of fire alarm systems
- Inspect for alarm panel accessibility
- Inspect for the presence of portable extinguishers and determine that they are located in conspicuous and readily available locations immediately available for use and not obstructed or obscured from view
- Inspect to determine that a portable fire extinguisher exists within a 30 foot travel distance of commercial-type cooking equipment that uses cooking oil or animal fat.
- Inspect to determine that manual actuation devices for commercial cooking appliances exist near the means of egress from the cooking area, 42-48 inches above the floor, 10-20 feet away, and clearly identifying the hazards protected
- Inspect to determine that the maximum travel distance to a fire extinguisher is 75 feet
- Inspect for the presence of sprinkler systems and determine if they were ever painted other than at the factory
- Inspect for the presence of emergency lighting systems
- Inspect for exit signs at all exits and inspect for independent power sources such as batteries
- Inspect for the presence of directional signs where exit location is not obvious
- Inspect for the presence of signs over lockable exit doors stating "This Door Must Remain Unlocked During Business Hours"
- Inspect for penetrations in any walls or ceilings that separate the exit corridors and/or stairwells from the rest of the building
- Inspect for fire separation doors that appear to have been blocked or wedged open or that do not automatically close and latch
- Inspect exit stairwell handrails

- Inspect for exit trip hazards.
- Inspect for the presence of at least two exits to outside or one exit that has a maximum travel distance of 75 feet
- Inspect exit doorways to determine that they are not less than 32 inches in clear width
- Inspect to determine that the exit doors were not locked from the inside, chained, bolted, barred, latched or otherwise rendered unusable at the time of the inspection
- Inspect to determine that the exit doors swing open in the direction of egress travel
- Inspect the storage at the time of the inspections to determine if it is potentially obstructing access to fire hydrants, fire extinguishers, alarm panels, or electric panel boards, or if it is obstructing aisles, corridors, stairways or exit doors, or if it is within 18 inches of sprinkler heads or if it is within 3 feet of heat generating appliances or electrical panel boards at the time of the inspection

### **Cooking area**

- Verify that all smoke or grease-laden vapor producing cooking equipment such as deep-fat fryers, ranges, griddles, broilers, and woks, is equipped with an exhaust system
- Inspect exhaust systems interior surface cleaning and inspection accessibility
- Inspect for grease buildup
- Verify that hoods are made of steel or stainless steel
- Verify that visible grease filters are arranged so that all exhaust air passes through the filters
- Verify that visible sections of exhaust ducts are not interconnected with any other ventilation system
- Verify that visible sections of exhaust ducts are installed without dips or traps that might collect residues
- Verify that exhaust ducts do not appear to pass through fire walls
- Try to verify that exhaust ducts lead directly to the exterior of the building
- Try to verify that exterior exhaust outlets do not discharge walkways or create a nuisance in the opinion of the inspector
- Inspect to determine that a portable fire extinguisher exists within a 30 foot travel distance of commercial-type cooking equipment that uses cooking oil or animal fat.
- Inspect to determine that manual actuation devices for commercial cooking appliances exist near the means of egress from the cooking area, 42-48 inches above the floor, 10-20 feet away, and clearly identifying the hazards protected