# FACILITY CONDITION ASSESSMENT

## **Specific Systems Inspections**

Reports are the result of visual inspection in accessible and observable areas at the time of the visual inspection including the following.

the visual inspection including the following.
1. SITE CHARACTERISTICS
2. STRUCTURE
3. BASEMENT/CRAWL SPACE WATER ENTRY
4. VENTILATION
5. HEATING
6. CENTRAL AIR CONDITIONING
7. ENERGY EFFICIENCY
8. PLUMBING SYSTEMS
9. ELECTRICAL
10. INTERIOR
11. EXTERIOR
12. ROOFING
13. CHIMNEYS
14. SAFETY
15. ENVIRONMENTAL
16. RELATED STRUCTURES / COMPONENTS/FACILITIES

#### 1.0 SITE CHARACTERISTICS

- 1.1 The consultant will observe, report and evaluate on-site characteristics as follows:
  - 1.1.1 Surface drainage characteristics as it relates to the structure
  - 1.1.2 Condition of walkways and exterior stairways
  - 1.1.3 Condition of driveways and other paved or masonry areas
- 1.2 The consultant is not required to examine/report on:
  - 1.2.1 Retaining walls, sea walls, waterfront bulkheads, docks and piers. These and other items not included as part of the building inspection can be inspected by special agreement
  - 1.2.2 Landscaping, trees and shrubs

#### 2.0 STRUCTURE

- 2.1 The consultant will observe, report and evaluate structure and structural adequacy as follows:
  - 2.1.1 Visible foundation components
  - 2.1.2 Visible floor framing
  - 2.1.3 Visible roof framing
  - 2.1.4 Structural performance based on visual, detectable movement
  - 2.1.5 Structural soundness and adequacy based on visual inspection
  - 2.1.6 Visible evidence of significant rot, wood-boring insect damage, or other forms of structural deterioration which would have an impact on the overall structural soundness and structural integrity of the building
  - 2.1.7 Visible evidence of structural distress or structural damage such as leaning walls, sagging beams or joist, unbraced trusses, damaged framing, fire damage, etc.
  - 2.1.8 Visible evidence of failure or deterioration of the foundation system such as severe cracking, inward movement, frost heave, etc.
- 2.2 The consultant is not required to:
  - 2.2.1 Enter crawl spaces or attic spaces where access opening is less than 18"x24"
  - 2.2.2 Enter spaces where headroom is less than 30"

- 2.2.3 Enter spaces where entry is obstructed
- 2.2.4 Enter spaces where adverse or dangerous situations are suspected
- 2.2.5 Enter spaces where entry may cause property damage

#### 3.0 BASEMENT/CRAWL SPACE WATER ENTRY

- 3.1 Consultant will observe, report and evaluate basement/crawl space water entry as follows:
  - 3.1.1 Evidence of water entry into the crawl space or basement
  - 3.1.2 Water control systems such as sumps, sump pumps, drains
  - 3.1.3 Proper discharge of mechanical water control systems
  - 3.1.4 Obstructions to proper operation
  - 3.1.5 Roof rain water runoff system including gutters, downspouts, extensions or splash blocks, as it relates to possible crawl space/basement water entry
  - 3.1.6 Relevance of exterior surface drainage to basement! Crawl space water ingress
  - 3.1.7 All conditions which would restrict the consultant's ability to examine the presence of water entry
- 3.2 The consultant will test:
  - 3.2.1 Water control systems, where possible, to confirm operation
- 3.3 The consultant is not required to:
  - 3.3.1 Operate inactive mechanical components
  - 3.3.2 Excavate subsurface drainage systems

## **4.0 VENTILATION**

- 4.1 The consultant will observe, report and evaluate ventilation as follows:
  - 4.1.1 Basement/crawl space ventilation
  - 4.1.2 Attic ventilation
  - 4.1.3 Mechanical ventilation for kitchens and bathrooms
  - 4.1.4 Laundry room ventilation
  - 4.1.5 Evidence of condensation and other consequences of inadequate ventilation when visible using normal inspection techniques

- 4.2 The consultant is not required to:
  - 4.2.1 Evaluate ventilation relative to code compliance (evaluation is for practical adequacy)
  - 4.2.2 Evaluate concealed ventilation systems

## **5.0 HEATING**

- 5.1 The consultant will observe, report and evaluate all permanently installed primary and secondary heating systems as follows:
  - 5.1.1 Type of heat (steam, hot water, hot air, etc.)
  - 5.1.2 Type of fuel or energy used
  - 5.1.3 Type of heating unit (furnace, steel boiler, cast iron boiler), the manufacturer and the rated output capacity (BTUH) based on nameplate data
  - 5.1.4 Physical condition of the heating equipment
  - 5.1.5 Zoning/distribution
  - 5.1.6 Condition of visible components including piping, ducts, thermostats, exposed flues
- 5.2 The consultant will operate using operator controls:
  - 5.2.1 All heating equipment
  - 5.2.2 All accessories such as humidifier and/or electrostatic air cleaner
- 5.3 The consultant is not required to:
  - 5.3.1 Make heat loss calculations to determine adequacy of capacity
  - 5.3.2 Operate equipment when weather conditions or other circumstances may cause equipment damage
  - 5.3.3 Ignite solid fuel fires
  - 5.3.4 Ignite gas pilot lights
  - 5.3.5 Perform smoke or carbon monoxide tests on equipment
  - 5.3.6 Override automatic safety controls to activate the equipment

#### **6.0 CENTRAL AIR CONDITIONING**

6.1 The consultant will observe, report and evaluate all permanently installed primary and secondary central air conditioning equipment as follows:

- 6.1.1 Cooling and air handling equipment type
- 6.1.2 Physical condition of the cooling equipment
- 6.1.3 Zoning/distribution
- 6.2 The consultant will test using operator controls:
  - 6.2.1 All permanently installed equipment
- 6.3 The consultant is not required to:
  - 6.3.1 Test when weather conditions or other circumstances may cause equipment damage
  - 6.3.2 Test prior to unit being serviced after seasonal shutdown or when off-season equipment covers are in place
  - 6.3.3 Take pressure or temperature readings using gauges
  - 6.3.4 Make calculations to determine capacity

#### 7.0 ENERGY EFFICIENCY

- 7.1 The consultant will observe, report and evaluate energy efficiency as follows:
  - 7.1.1 The presence or absence of insulation in the crawl space, basement and attic and appropriate vapor barrier
  - 7.1.2 Presence or absence of storm windows
  - 7.1.3 Recommendations for reducing energy losses when appropriate
- 7.2 The consultant is not required to:
  - 7.2.1 Perform energy calculations
  - 7.2.2 Perform life cycle cost analysis

## **8.0 PLUMBING SYSTEMS**

- 8.1 The consultant will observe, report and evaluate plumbing systems as follows:
  - 8.1.1 Interior water supply distribution system including:

Water supply and piping

Fixtures and faucets

Water pressure and water flow

**Evidence of leaks** 

Presence of visible cross connections and backflow prevention devices Pipe insulation

8.1.2 Interior drain, waste and vent system including:

Traps, drains, waste, and vent piping, and piping supports

**Evidence of leaks** 

Water pipe drainage

Evidence of problems with wastewater systems

8.1.3 Domestic hot water systems including:

Heating equipment and energy source

**Automatic safety controls** 

Chimney, flue and vents

8.1.4 Fuel storage and distribution systems including:

Interior fuel storage

Leaks in above ground oil tanks and visible piping

Condition of visible gas piping, gas metering and LPG gas systems

- 8.2 The consultant will test:
  - 8.2.1 All interior fixtures for adequacy of pressure where not connected to a household appliance
  - 8.2.2 All interior fixtures for adequacy of drainage
  - 8.2.3 All interior fixtures for presence or absence of leaks
- 8.3 The consultant is not required to:
  - 8.3.1 Test water pressure and water flow with the use of instruments or measurements
  - 8.3.2 Inspect or test underground septic tank

#### 9.0 ELECTRICAL

- 9.1 The consultant will observe, report and evaluate electrical equipment as follows:
  - 9.1.1 Service entrance conductors
  - 9.1.2 Service equipment, grounding, main over current device, main and distribution panels

- 9.1.3 Amperage and voltage ratings
- 9.1.4 Branch circuit over current devices
- 9.1.5 Ground Fault Circuit Interrupter (GFCI) devices
- 9.1.6 Need for immediate or imminent repairs and/or upgrading
- 9.1.7 Any observed aluminum or copper-clad aluminum branch circuit wiring
- 9.2 The consultant will test:
  - 9.2.1 Operation of a representative number of installed lighting fixtures, switches and receptacles located inside the house
  - 9.2.2 Operation of Ground Fault Circuit Interrupter (GFCI) devices
- 9.3 The consultant is not required to:
  - 9.3.1 Insert any tool, probe or testing device inside the panels
  - 9.3.2 Test or operate any over current device
  - 9.3.3 Dismantle any electrical device or control other than to remove the cover of the main control panel
  - 9.3.4 Evaluate telephone, security, cable TV intercoms or other low voltage ancillary wiring which are not part of the primary electrical distribution system

## 10.0 INTERIOR

- 10.1 The consultant will observe, report and evaluate interior components as follows:
  - 10.1.1 Walls, ceilings, and floors including tile work and trim
  - 10.1.2 Steps, stairways, balconies, and railings
  - 10.1.3 Cabinets and counters
  - 10.1.4 Representative number of windows and doors including hardware
  - 10.1.5 Separation walls, ceilings, and doors between a dwelling unit and an attached garage or adjoining dwelling unit
- 10.2 The consultant is not required to:
  - 10.2.1 Comment on aesthetics or design
  - 10.2.2 Comment on wear and tear

### 11.0 EXTERIOR

- 11.1 The consultant will observe, report and evaluate exterior components as follows:
  - 11.1.1 Exterior wall coverings, flashings and trim
  - 11.1.2 Primary windows and doors
  - 11.1.3 Garage door operators including automatic reversing operation
  - 11.1.4 Decks, balconies, stoops, steps, areaways, and porches including railings
  - 11.1.5 Eaves, soffits and fascias
- 11.2 The consultant is not required to:
  - 11.2.1 Report on outbuildings unless included by separate agreement prior to the inspection

#### 12.0 ROOFING

- 12.1 The consultant will observe, report and evaluate roofing as follows:
  - 12.1.1 Roof surfacing
  - 12.1.2 Roof drainage systems
  - 12.1.3 Flashings
  - 12.1.4 Skylights, chimneys and roof penetrations
  - 12.1.5 Evidence of leaks, condensation
- 12.2 The consultant is not required to:
  - 12.2.1 Walk on the roofing but should describe the methods used to observe and evaluate the roofing components such as use of binoculars, ground observation, etc.

## 13.0 CHIMNEYS

- 13.1 The consultant will observe, report and evaluate chimneys as follows:
  - 13.1.1 Chimney flue liners where visible from grade level
  - 13.1.2 Flue connections
  - 13.1.3 Structural integrity of chimney
  - 13.1.4 Configuration/location of chimneys
  - 13.1.5 Fireplace dampers

- 13.1.6 Fireplaces
- 13.2 The consultant is not required to:
  - 13.2.1 Test combustion devices, such as fireplaces (lighting fireplace)
  - 13.2.2 Examine chimney from rooftop

## **14.0 SAFETY**

- 14.1 The consultant will observe, report and evaluate:
  - 14.1.1 Condition and adequacy of handrails and guardrails
  - 14.1.2 Condition of stairways
  - 14.1.3 Glass vulnerable to human impact
  - 14.1.4 Smoke alarms
  - 14.1.5 Fire separation at chimneys and garages
  - 14.1.6 Solid fuel appliance installation (wood stove)
- 14.2 The consultant is not required to:
  - 14.2.1 Check code compliance
  - 14.2.2 Check ADA compliance

## **15.0** ENVIRONMENTAL

- 15.1 The consultant will observe, report and evaluate:
  - 15.1.1 Presence of suspected asbestos containing materials (ACM)
  - 15.1.2 Evidence of underground storage tanks (UST)
  - 15.1.3 Evidence of urea formaldehyde foam insulation (UFFI)
- 15.2 The consultant is not required to:
  - 15.2.1 Conduct comprehensive environmental scan
  - 15.2.2 Report of suspected hazardous materials not noted above
  - 15.2.3 Conduct tests for hazardous materials

## 16.0 RELATED STRUCTURES / COMPONENTS/FACILITIES

- 16.1 The consultant is not required to inspect any of the following:
  - 16.1.1 Solar heating systems
  - 16.1.2 Geothermal systems
  - 16.1.3 Outdoor barbecues
  - 16.1.4 Saunas
  - 16.1.5 Swimming pools
  - 16.1.6 Tennis courts
  - 16.1.7 Piers and docks
  - 16.1.8 Boathouses
  - 16.1.9 Waterfront bulkheading
  - 16.1.10 Cabanas
  - 16.1.11 Cottages/guesthouses
  - 16.1.12 Private water supply
  - 16.1.13 Private waste water analysis
  - 16.1.14 Satellite dish systems
  - 16.1.15 Any items not specifically included in this standard

NOTE: Any special or additional inspections may be available by special agreement prior to the inspection.

## **Limitations and Exclusions**

Consultants are not required to perform the below except to the extent agreed upon in the scope of work:

- a. Prepare calculations within the scope of a building inspection
- Remove materials, furnishings, personal property, or any other obstructions (snow, ice, debris, suspended ceiling tiles, secured shut access panels, etc.)

- c. Operate equipment not typically operated by normal layman user controls
- d. Conduct exploratory probing or testing
- e. Report on architectural and cosmetic incidentals (carpeting, wallpaper, draperies, blinds, built-in furniture, trim)
- f. Report on security systems, intercoms, sound systems, fire alarm systems, cable TV, telephone or other low voltage ancillary wiring
- g. Discover or evaluate underground systems, tanks, lawn sprinklers, subsurface soil conditions, streams, groundwater levels, well casing, wells and pumps, septic and on-site waste disposal systems
- h. Provide an appraisal of the property
- i. Comment on whether the property should be purchased leased, rented, etc.
- j. Perform any procedure or enter any area which has the potential to damage the property or its components or be dangerous to the consultant or other persons
- k. Attempt to repair or operate any system or component which does not respond to normal layman user controls or which is shut down or otherwise inoperative
- I. Report on items not permanently installed (appliances, personal property)
- m. Report on the presence or absence of pests such as wood damaging organisms, rodents, birds, droppings or insects, etc., except as it may relate to the structural soundness and adequacy of the building and is readily visible
- n. Perform an environmental assessment or laboratory testing to determine the presence or absence of any hazardous substance including, but not limited to: toxins, carcinogens, noise, contaminates of soil, water and air
- o. Perform a wind, earthquake, seismic or flood insurance study

- p. Test items requiring a special permit or training (radon, lead, asbestos, etc.)
- q. Test items requiring a special permit or training (radon, lead, asbestos, etc.)
- r. Evaluate or determine the effectiveness of any system installed to control or remove suspected or known hazardous materials
- s. Perform acoustical or vibration testing or evaluation of noise or vibration characteristics of nay system or component
- t. Determine the material of which components or systems are made
- u. Perform electromagnetic field testing
- v. Provide policies of insurance for building failure
- w. Provide opinions regarding handicap characteristics or health characteristics of the premises in so far as allergies, disease or disabilities are concerned
- x. Provide opinions regarding historic aspects of the premises report on any device or system which has not been specifically indicated herein, this includes but is not limited to solar heating systems, geothermal systems, outdoor barbecues, saunas, steam baths, satellite dishes, intercom systems, alarm systems, lawn sprinkler systems, etc.

#### **Definitions**

Access Panel- A panel used for the purpose of gaining access to a piece of equipment for maintenance, repair, or cleaning of the equipment; a panel used to gain access to an area such as a crawl space or attic cavity

Activate- To turn on or operate a piece of equipment by normal means such as turning on the furnace with the thermostat controls

Automatic safety controls- a device used to protect people and equipment from malfunction caused by excessive pressure, temperature, or other hazardous operating conditions

Central air-conditioning- A system used to cool and/or dehumidify the space of a building in one or more room(s) by means of duct or chilled water pipe distribution; and is built into the structure of the building with direct wiring from electrical control panel

Central heating- a system used to warm the space of a building in more than one room by means of duct or pipe distribution; it is built into the structure of the building; individual room electric heaters throughout the premises could also heat a building

Component- a unit part of a system such as the gas valve in the furnace or a rafter of a roofing system

Cosmetic- A condition that affects the appearance of an item rather than the structural integrity or intended function thereof

Crawl space- An area under a home enclosed by the foundation walls and generally 3 to 4 feet high which can only be examined by crawling or being bent over; this space usually w9ill have plumbing supply and drain lines, electrical wiring, and mechanical systems; a crawl space with a clearance of less than 30" is considered

Cross connection- any physical connection or arrangement between potable water and any other water of unknown or questionable source of possible contamination

Dangerous or adverse condition- Any condition or situation which has the possibility of causing injury or health threats to the inspection consultant; these conditions may require special protective clothing or safety equipment and in certain cases, such as crawl spaces areas, cannot be entered until the condition is corrected

Detached buildings- any structure apart from the main structure and under a separate roof and foundation system

Direct wired components- a device, which is connected to the electrical system and cannot be readily unplugged or disconnected

Flue pipe- the pipe connecting the firing chamber exhaust of a hydrocarbon fueled device such as a heating unit or water heater to a chimney

Heat source- any device used for the purpose of adding heat to an area

Household appliance- A device, either freestanding or built in, used to provide an ongoing function by providing a specific

household duty such as a dishwasher, oven, range, garbage disposal, washer, dryer, etc.

Installed- An item that is physically attached to the home with nails, screws, etc., and could not be removed by unplugging or disconnecting by hand

Normal user operating controls- Controls such as a thermostat of the heating and cooling system used to operate equipment by a layman homeowner or tenant

Observe- To make a visual study of a component without removing covers, finished surfaces, blocked access panels, debris, belongings

Operate- To activate a device by the normal user operating controls

On-site water supply quality- Water quality is based on the bacterial, chemical, mineral, metal, and solids content of the water

On-site water supply quantity- Water quantity is the accumulated water volume resulting from the rate of water flow

Proper fixture drainage- the rate of a drainage flow sufficient to prevent overflowing or backing up during normal operating and use

Proper water pressure- Pressure needed to produce a rate of water flow of a plumbing fixture that provides sufficient flow when another fixture is operated at the same time

Readily accessible- Having the ability to inspect an item or equipment with out having to move or relocate furniture or stored items or damage paint finishes; ability to enter through access panels large enough for an average size person; panels are not considered accessible if they cannot be reached with the aid of a four foot ladder or require tools to open; minimal access opening is 18" x 24".

Representative number- A defined number of items to be inspected when there is a number of like items in a facility, building, or home such as electrical switches, outlets and windows; this number will be one per room or one per side of the exterior

Roof drainage system- the system used to carry rainwater from a roof away from the foundation of the structure; this system consists of guttering, downspouts, splash blocks, and proper grade for drainage

Safety glazing- Tempered glass or plastics

Shut down- When an item cannot be operated by normal controls it is considered to be shut down; the consultant is not required to light pilot lights, turn on gas supply, switch breakers, replace fuses or light bulbs, plug in equipment, open closed water valves, etc.; all items intended to be a part of the inspection shall be in operation prior to the inspection.

Structure- any construction designed and used to provided support against natural forces in additional to live and dead loads

Structural component- a member used for the purpose of supporting certain design loads

System- A specific part of a building composed of several components used for a specific purpose such as the electrical system, HVAC, system, plumbing system, etc.

Technically exhaustive- A building inspection as covered by these standards of practice is comprised of a visual inspection and brief operation of equipment and is not considered technically exhaustive; an inspection is technically exhaustive when it involves the extensive use of measurements, instruments, testing calculation, exploratory destructive probing when justified, and other means to develop scientific or consulting findings, conclusions and recommendation.