City of Gresham Residential Building/Mechanical Final Inspection Checklist

August 2008

This checklist is intended for our customers to prepare for an inspection. It is also intended for our inspectors to improve consistency and overall service delivery.

Please verify the following before calling for the Inspection:

**Permits and Plans**
- Job address is posted in a visible location.
- White Inspection Record Card (Hard Card) and approved plans are on site and accessible to the inspector.
- Permit information is correct (address, permit number, description of work, etc.).
- The finished work accurately reflects the approved plans.
- Obtain plumbing and electrical final approvals. (Please call for the mechanical final with building final.)
- Building cannot be occupied without approval by the Building Division.
  Note: If special inspection was required for the project, the contractor will provide copies of all daily field reports prior to calling for final building inspection.

**Exterior**
- House numbers are posted on the structure and are visible from the street.
- All exterior windows, doors, penetrations and openings including A/C and condensate lines are caulked, sealed and weather-stripped.
- Check flue height and clearances.
- Check connections and framing of elevated decks. Deck details are part of the approved plans.
- There is a 6 inch minimum vertical distance from soil to untreated wood siding/trim and the soil is sloping away from the building a minimum of 6 inches in 10 feet or 5%.
- Approved drainage systems, swales or berms at property lines or where needed to direct flows to an approved dispersal point (yard drain, catch basin, street, etc.).
- Permit is required for retaining walls when supporting a surcharge or when higher than 4 feet (measured from the bottom of the footing).
- Driveway approaches and city sidewalks shall be completed in accordance with the city public works standards. Private driveways are required to be sloped not more than 15%.
- Street trees and safe neighborhood requirements must be completed if applicable.

**Interior**
- Minimum clear width of hallways is 36 inches finish to finish.
- Vehicle barrier and seismic strapping are in place for gas appliances in the garage.
- All mechanical equipment functions properly. Equipment, shut off valves and vents are installed with proper clearances, support and slope. Adequate combustion air provided.
- Check ducts for water, dust and debris.
- Ensure all louvers and registers are in place.
- Locks and hardware installed on all egress doors and windows.
- Access is provided to equipment under spas or tubs.
- Openings between the garage and residence are sealed or protected.
**Stairs and Handrails**

- Top of handrails are installed minimum 30 inches, maximum 38 inches measured from the nose of the tread.
- Circular handrails are to be a minimum of 1¼ inches and a maximum of 2 inches in cross-section dimension.
- Other handrails must have a perimeter dimension from 4 to 6¼ inches and a maximum 2¼ inches in cross-section.
- Handrails with a perimeter greater than 6¼ inches must have a graspable finger recess on both sides. The width above the recess must be from 1¼ to 2¼ inches.
- Handrails must be located a minimum of 1½ inches away from the wall.
- Riser height is 8 inches maximum. Tread depth is minimum 9 inches. Maximum deviation from greatest to the smallest for risers and treads in 3/8 inch. Stair width minimum 36 inches above handrail.
- Verify guardrail height is a minimum of 36 inches (34 inches at stairways).
- Open risers, guards and ornamental closures are not to allow the passage of a 4 inch sphere (5 inch at stairway guards).
- Stairways are properly illuminated with a light switch at the top and bottom of the stairs.
- Minimum of 6 feet 8 inches headroom clearance at stairs measured from the nose of the tread.
- Handrails are continuous and terminate or are returned to walls, newel posts or safety terminals.
- Handrails for stairways with winder treads are located on the narrow side.

**Windows and Glazing**

- Safety glazing installed at all hazardous locations subject to human impact loads including the following locations:
  - Glazing in doors, walls and enclosures for hot tubs, whirlpools, saunas, bathtubs and showers
  - Glazing in doors or glazing within a 24 inch arc of a door edge
  - Glazing panel (all the following must be true):
    1. greater than 9 square feet and
    2. bottom edge less than 18 inches and
    3. top edge greater than 36 inches above the floor and
    4. a walking surface within 36 inches
  - Glazing in railings and at landings or within 60 inches of the stairway
  - Glazing within 60 inches of the water’s edge at swimming pools, hot tubs, spas
- Bedroom egress windows ≤ 44 inches measured from the floor to the bottom of the window opening with a minimum 5.7 square foot clear opening and 20-inch minimum width, 24-inch minimum height.

**Smoke Detectors**

- Interconnected smoke detectors, hardwired with battery backup, are required at each floor level, in each bedroom and outside each sleeping area.

**Underfloor Space**

- Clear of debris with 6 mil. black plastic ground cover installed.
- Must be dry or provide an approved drainage system.
- Provide a secure access ladder for inspection when over 2 feet deep.
- A minimum 18 x 24 inch unobstructed access with insulated hatch and handle.
- Insulation is installed under floor
- Ducting is minimum 1 inch above the ground cover and properly supported.
- Ventilation not blocked.
Attic

- 22 inch x 30 inch insulated access with minimum 30 inches headroom clearance.
- Proper insulation is installed.
- 1 inch minimum distance from 'b-vent' and insulation.
- Fan ducts not displaced in attic and exhaust directly to the exterior.
- Ventilation not blocked.

Note: These are general requirements only and do not reflect all conditions. For additional information please contact the Building Division at 503-618-2845.