

Building Code Field Inspection Requirements

Jobsite Inspection Policy

(International Building Code - 104 & 110)

(International Residential Code - R104 & R109)

The City of Bainbridge Island Building Department enforces regulations set forth in the **International Building Code - Sections 104 & 110** and **International Residential Code - Sections R104 & R109**. The following information was developed to assist our customers with understanding inspection requirements so they may achieve a seamless inspection process, have increased project readiness, and eliminate any unnecessary delays and/or additional financial constraints.

Requirements for Inspection Access and Readiness

- Site address **must** be posted or displayed, visible from the right of way and match the address on the issued permit.
- Any locked gates must be unlocked, or gated community access codes provided to prevent lack of access to the job site (please provide this information to staff at time of inspection scheduling).
- Job **must** be ready for inspection when the City Building Inspector arrives.
- When access to area of inspection is hazardous (including inclement weather conditions) or unsuitable and cannot be rectified in a reasonable time, the inspector may cancel inspection and leave notification for inspection to be re-scheduled when access can be safely granted.
- Dogs/pets must be restrained during time of inspection.
- **Approved** plans and documents **matching** the field inspection permit cards and the permit number requested for inspection must be on the job site and available to the inspector at time of inspection. Failure to provide approved documents may delay your inspection.
- Substantial deviation from the approved set of plans must first be approved by the Department of Planning and Community Development. Any changes to the plans must be submitted and **approved** by the City of Bainbridge Island **prior** to inspection. All **approved** revisions are to be on site **at time of inspection**.
- Required special inspections and 3rd party reports must be up to date and completed. Special inspection reports must be made available to the City Inspector at time of inspection unless other arrangements have been made in writing previously.
- The owner, contractor or owner's agent must be present at the site for inspections. An adult must represent all job sites. **City staff will not enter a building with an unattended minor.**
- Work to be inspected must be complete and accessible for inspection including any ladder or other device needed to ensure access to the inspection area. Any access equipment must be installed/used in a safe manner. Ladders must be secured and of sufficient length and strength.
- Corrections from previous correction notices must be completed unless specifically approved by the inspector.

Required Inspections (IBC Section 110, IBC Chapter 17, IRC Section 109 & WA State Energy Code)

The following is a list of required inspections for most building projects. Inspection requests should be grouped into these categories whenever possible. Other inspections, including special inspections, may be required to ascertain compliance with the building code.

***Note:** A pre-construction meeting with the City is required on commercial, multi-family and complex residential projects. Additionally, it is recommended that property owners who are unfamiliar with methods of construction meet with their City Inspector prior to the start of construction for an on-site consultation. Please call our office between 8:00 a.m. and 3:00 p.m. to schedule a pre-construction meeting.*

- **TSEC-** Temporary Sediment Erosion Control measures **must** be in place and **inspected** prior to any other inspections.
- **Building Setback Verification:** Building Setbacks are to be staked and a minimum of one side and either a front or back string line must be in place prior to foundation/footing inspection. **Proper verification of clearance from any setbacks or critical zones and buffers, must be verifiable.** If the building setbacks cannot be verified, the City of Bainbridge Island reserves the right to request that a professional survey be completed. This will ensure that the structure is built within the approved building envelope.
- **Foundation/Footing Inspection/Electrical Grounding (UFER):** Footing inspection shall be made after excavation to suitable subgrade has been made, all forms are level and secured in place, required horizontal and vertical reinforcement is tied/chaired in place per plans, all footing penetrating bolts or hold-downs are installed, all proper clearances from the reinforcement to ground are acceptable, and UFER grounding method is in place per current edition of the NFPA 70/National Electrical Code.
- **Foundation/Stem-wall Inspection:** Stem-wall inspection shall be made after all forms are constructed and required reinforcement steel, seismic hold down restraints and seismic anchor bolts are set in place at all designed shear walls per approved plans. Foundation low point drain sleeves must be in place. Any 3rd party special inspections must be completed prior to inspection. Any special reports shall be provided to the inspector at the time of inspection. Concrete shall not be poured/placed until the City building inspector has signed the job card.
- **Concrete Slab and Associated Items Inspection:** Inspection shall be made after all underground drain/waste/vent and water supply plumbing has been tested, electrical conduit approved, mechanical ducts, hydronic systems, insulation, vapor barrier, required steel re-enforcement, and any other items are installed per specifications on the approved plans. The City building inspector must sign the job card before any concrete is poured/placed.
- **Lowest Floor Elevation:** In flood hazard areas, prior to placement of the lowest floor, including the basement, and prior to any vertical construction, an elevation certification required by Bainbridge Island Municipal Code 15.05 shall be recorded with the Building Official. Any questions must be directed to the Building Official related to flood zone compliance.
- **Underfloor Frame Inspection:** Vapor barrier, framing members, joists, post and beams, gussets, and hardware shall be installed per plan engineering and manufacturers recommendation. Any point loads shall be installed with the grain vertically and all structural blocking required for shear and bearing walls shall be in place. Sub-floor sheathing is not to be installed until inspection of the underfloor has been signed off on the job card.

- **Exterior Shear Inspection:** Shall be made after all exterior wall sheathing is attached and all specified shear walls have had the perimeter of each panel and the field nailed per the shear-wall instructions. All panels shall be nailed with the appropriate nail size and nailed flush, without fracturing the surface of the shear panel. All shear blocking, drag struts, and shear straps/clips shall be nailed and attached according to the shear-wall schedule.
 - Note: All exterior shear panel types and truss drag struts are to be identified with bright, identifiable paint or other suitable markings, prior to the inspector's arrival.*
- **Interior Shear:** Shall be made after all panels have been placed and nailed according to the shear wall schedule. All hardware necessary for shear transfer shall be attached per plans and in place at time of inspection. First side of double-sided shear walls may be attached and inspected at first interior shear wall inspection. The second side of double-sided shear walls are to be inspected after insulation but before drywall.
- **Hold-downs:** Shall be inspected for proper installation according to the manufacturer's specifications and any applicable engineering requirements.
 - Note: Special Inspection is required for all retrofit, epoxy hold-downs unless otherwise approved prior to installation. Proper procedure for installation must be observed and recorded by an approved 3rd party and a report provided to the COBI inspector at time of hold-down inspection.*
- **Plumbing Inspection:** Shall be made after all plumbing is in place and under pressure, ready for inspection. All drains, waste, and venting (DWV) shall be filled completely with water and tested with a minimum 10' head test for 15 minutes or air tested at 5 psi for 15 minutes. Plastic DWV are not allowed to be tested with air. All supply lines shall be tested with water at 50 psi or tested at working pressure for 15 minutes. All supports shall be in place along with all protective nail plates where applicable.
- **Mechanical Inspection:** Shall be made after the furnace/air handler/boiler, ducting, venting, and refrigerant lines have been roughed-in. All supports, straps, and protective plates shall be in place.
- **In-floor Heating:** All hydronic lines shall be under pressure of 100 psi for 15 minutes for testing or under manufacturer's recommended testing pressure. All boiler systems shall be roughed in and tested according to the manufacturer's recommendations.
- **INT/EXT Gas piping:**
 - **Interior-** Interior gas piping shall be installed and properly secured per code (Fire Code Chapter 61 and Table 6104.3 for location of LP gas containers). The piping shall be stubbed outside to the exterior of the building and tested under a minimum 3 psi for 10 minutes. LP gas shall be tested at no more than 1-1/2 times the working pressure, but not less than 3 psi. The gauge high reading shall be no more than 5 times the test pressure. **Example:** If the LP gas is tested at 3 psi, the gauge maximum can only be a 15 psi gauge.
 - **Exterior-** Follow the COBI handout for all questions relating to exterior installation or burial for LP gas piping. Testing is the same for exterior piping. The tank shall be placed in the appropriate location. The filling point of the LP tank shall be a minimum of 5 feet in a horizontal plane or below from windows and openings under the building, and 10 feet from the filling point to sources of combustion or mechanical intakes.
- **Caulk/Seal:** All penetrations at the top and bottom plates shall be sealed to prevent fire from drafting. Other areas required to be sealed are at the top of furred-out walls and every ten feet horizontally. Any concealed spaces must be fire blocked and sealed from fire drafting. Any concealed space that is larger than 1,000

square feet must be draft-stopped and any penetrations sealed. The bottom plate of every exterior wall must have a bead of caulking or approved sealant on the inside to prevent drafting. All windows and doors must be sealed around the perimeter by an approved sealant. All penetrations through the building walls must be sealed. All these areas must be sealed prior to inspection.

- **Rough Framing Inspection:** Shall be made when the structure is weather-tight. The roof and all exterior walls shall be wrapped with the appropriate water resistive barrier and all windows and doors shall be in place at the time of framing inspection. All rough plumbing, mechanical, electrical, and any other required inspections or 3rd party reports are to be completed at this time. Framing, fire blocking, bracing, point load paths, post and beams and hardware are to be installed per code, plans, and manufacturer's specifications. All caulk/seal penetrations must be completed. Inspection of the truss system is mandatory, and a copy of the engineering shall be on-site at the time of inspection.

***Note:** Fire Sprinkler System inspection to be called in separately and scheduled through the Bainbridge Island Fire Department and must be approved before rough framing inspection is scheduled.*

- **Roof Inspection:** Shall be made after bracing materials for roof structure, exterior wall sheathing/shear walls, shear blocking, roof blocking, point load members, perimeter blocks, squash/crush blocks and floor sheathing are installed and all other structural connections are in place (beams, straps, clips and miscellaneous hardware).

Note:** Roof nail inspections are at the inspector's discretion. All roof drag-nailing, straps or special nailing layout should be marked with identifiable paint in order to readily see the nailing or as specified by the inspector. At all times, Inspectors will use discretion and maintain personal safety related to entering onto a roof. **If entering onto a roof, appropriate fall protection must be utilized as required by WA Statutes.

- **Insulation Inspection:** Insulation is installed after rough framing inspection is approved. Written notes from the City building inspector such as "OK to insulate" or "OK to insulate partial areas" with conditions, locations, and listed correction items that are outstanding, must be able to be re-inspected without removing insulation. Insulation inspection shall be made after all insulation is secured in place and installed as required per the WSEC energy compliance documentation, requirements, and installation standards.
- **Lath, Gypsum Board and Gypsum Panel Product Inspection:** Lath, gypsum board and gypsum panel product inspections shall be made after lathing, gypsum board and gypsum panel products, interior and exterior, are in place, but before any plastering is applied or gypsum panel joints and fasteners are taped and finished.

***Note:** In garages with living area above, the screw pattern and installation method for gypsum is to be fire-rated type X installed perpendicular with all fasteners at 6" on center. If using lath, lath inspection shall be signed off on the job card before stucco is applied and each layer shall be inspected.*
- **Fire and Smoke Resistant Penetrations:** Protection of joints and penetrations in fire resistant rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.
- **Special Inspections:** All special inspections/structural observation services, when required, must be completed with daily reports available to the City building inspector and written approval given to City building inspector at time of inspection or as otherwise agreed. Special inspections are to be completed prior to scheduling a City building inspector and a report provided per the special inspection agreement developed during plan review.

- **Other Departments:** All other departments shall be satisfied for their respective part of the construction process. All requests and conditions of the permit shall be met as required during the project and approved by each department before final inspection will be granted.
- **Final Inspection:** Shall occur after construction is complete and before the building is occupied. The building must be unlocked or arrangements made for the City building inspector to access the building. All appliances, electrical fixtures, convenience outlets, switches and plates must be in place. A ladder is to be provided for access to the attic and under-floor spaces. Energy compliance documentation is to be filled out and placed within 3 feet of the electrical panel.

Note: If special inspections are required, a final summary special inspection report must be submitted for review and approval. All final paperwork is required to be onsite at time of final or as otherwise arranged and a final report made to the City.

If not completed already, the following documents must be provided when required before final inspection will be provided:

- Structural Observation Final Summary Report
- Special Inspection Final Summary Reports
- Geo-technical Final Summary Reports
- Air Balance Reports/Blower Door Test(s)
 - 2015 WSEC Energy documents, commissioning reports. Projects that are permitted on or after July 1, 2016 shall use the 2015 WSEC commercial provisions compliance forms to document compliance with the 2015 WSEC. The 2015 WSEC compliance forms are available for free to download at:

Commercial Energy Forms:

<https://www.neec.net/energy-codes/>

- I. Building Envelope
- II. Lighting
- III. Mechanical

Residential Energy forms:

WSU Energy Extension for Residential Energy Code Technical Support
 – <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx>

NOTE: An approved third party shall conduct Blower Door testing.