



# Major Commercial Alteration (no additional floor area)

**Major Alterations are those which are more complex than minor alterations, and all alterations for sprinklered buildings or those that have fire alarm systems.**

**There are two categories of Major Alterations, RJ13 and RA13. The category determines how many sets of drawings you need to provide for review.** Projects with mezzanines, or additional floor area, are processed as Commercial Additions. See appropriate handout.

### Examples of Category I:

- Creating additional office space within existing building
- Changes which affect the amount of parking required
- Changes to a dumpster location or landscaping that do not affect fire access

Submittal Documents Required for Category I:

- 4 copies of site plans
- 4 copies of construction plans
- 2 sets of lighting calculations
- 1 copy of City of Kent Water Usage Survey

### Examples of Category II:

- Addition of roll-up doors
- Increasing the hazard, such as production, distribution, use or storage of flammable materials or other hazardous materials
- Changing Fire Department access or turnaround
- Deleting or adding a Fire Lane
- Medical Gas use or storage
- Changes that affect exiting
- Adding a restaurant (If the use of the building changes, see procedure for Change of Use)
- Demolishing a portion of a building

Submittal Documents Required for Category II:

- 5 copies of site plans
- 4 copies of construction plans
- 2 sets of lighting calculations
- 1 copy of City of Kent Water Usage Survey

### **Minimum Requirements for Construction Drawings**

Plans shall be designed using the 2015 editions of the International Building Code (IBC) and 2015 International Mechanical Code (IMC), and the 2015 Uniform Plumbing Code (UPC); and the International Energy Conservation Code as adopted and amended by the State of Washington and the City of Kent. Plans and general notes, soils reports, and engineering calculations based on other codes will not be accepted. EXCEPTION: An applicant may have an alteration to an existing non-residential building be reviewed for compliance with the 2015 International Existing Building Code (IEBC) upon request. Plans meeting the requirements of the IEBC will be deemed to comply with IBC Chapter 34.

Plans shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show that it will conform to the provisions of the adopted Codes and ordinances. Acceptable drawings sizes are those that are 24" x 36" and drawn to an appropriate scale as listed below. Plans shall be drawn in indelible ink. Plan sheets that are cut and pasted, taped, or that have been altered by any means ( pen, pencil, marking pens, etc.) will not be acceptable for plan check.

Washington State law requires that any registered professional who prepares or supervises the preparation of drawings and construction documents stamp and sign such documents. Where multiple copies of stamped submittal documents are submitted, at least one set must bear an original wet seal.

Deferred submittals must be listed by the architect or engineer on the plans and submitted to the building official for review. The architect or engineer of record shall be responsible for reviewing and coordinating all submittal documents prepared by others, including deferred submittal items, for compatibility with the design of the building. IBC Sec 107.3.4.1

When special inspection is required by IBC Section 1705, the architect or engineer of record shall indicate the portions of work that require special inspection on the construction drawings.

## Site Plan

Architectural, Landscape, and Civil.

- 1. Scale and north arrow. Max. scale 1"=40' (Preferred scale 1"=20' or 1"=40')
- 2. Show basic data (type of structure, square footage, dimensions, location).
- 3. Show dimensions of lot, distance to property lines, buildings located on adjacent lots, street name, location and use, and vicinity map.
- 4. Show landings at exit doors and stairways and provide a description of the materials that are to be used to provide the required firm and stable path leading to public way.
- 5. Show existing and proposed structures labeled with dimensions.
- 6. Show an accessible route of travel connecting the public way to the accessible building entrances
- 7. Clearly designate the location of the accessible parking spaces required per IBC Table 1106.1. Parking spaces shall be designed to meet IBC Sec. 1106.6/ICC A117.1-09.
- 8. Show that exterior accessible routes of travel are illuminated per IBC Chapter 11 & ICC A117. 1-09.
- 9. Show a space for the storage of recycled materials and solid waste. WAC 51-30-009. Show location of trash enclosure.

## Floor Plan

- 1. Specify scale and show north arrow (1/4" or 1/8" scale).
- 2. Provide dimensions, square footage and clearly label the use of all rooms or areas per IBC Sec. 302
- 3. Provide wall legend. Delineate all wall types including but not limited to: new, existing, bearing, non-bearing, wood, steel, shear, and demising, partial height. Delineate between insulated and non-insulated, demolished, relocated, etc. Provide accurate wall legends that match the structural plans

and the energy calculations. Clearly label all rated fire resistive assemblies, including but not limited to fire walls, fire barriers, occupancy separations, horizontal exits, rated corridors, stair and shaft enclosures. Provide reference number, and manufacturer's written description and pictorial detail on plans.

- 4. Show the location and specify the opening and header sizes for all windows and doors. Show the direction of door swing for all doors. Provide accessibility at doors per IBC Sec. 1105.
- 5. Provide a complete door-hardware schedule.
- 6. Glazing required to be safety glazing per IBC Sec. 2406 shall be identified on plans.
- 7. Show water fountains, built-in cabinets, counters, tables, chairs and permanent fixtures.
- 8. Unless separate mechanical, electrical, sprinkler and alarm plans are submitted, these items should be detailed on the floors plans.
- 9. Show plumbing fixtures per State of Washington Amended IBC Sec. 2902 and Table 2902.1. Show all plumbing dimensions for supply lines and drains.

## Structural Design

ALL alterations in structures greater than 4,000 sq.ft., shall be designed and bear the stamp of a Washington State Licensed Architect and/or Professional Engineer. An engineered design must be submitted for all projects which are not within the scope of the conventional light-framing construction provisions of IBC Sec. 2308.

- 1. Specify size, span, spacing, species and grade of lumber for wood framing members.
- 2. Specify size, span, spacing, and gage of steel framing members.
- 3. Provide attachment details for top and bottom plates. Specify size and spacing of fasteners.
- 4. Show complete load paths capable of transferring all loads and forces from their point of origin to the load-resisting elements. Sufficient detail should be provided to verify all bearing points.

- 5. Specify size of wood headers for openings over 4'0" wide. IBC Sec. 2308.4.4
- 6. Fasteners and connectors must be detailed to show how the structural components are attached. Detail positive connection between posts and beams.
- 7. Show posts under beams. Show connections, beam to beam, beam to post, post to foundation using approved metal connectors or other positive connection.
- 8. Provide deflection detail stamped by architect or engineer for full height walls.
- 9. Specify panel identification index for floor plywood and roof sheathing. IBC Sec. 2304.7. Plywood roof sheathing shall be bonded with exterior glue.
- 10. Clearly show bearing and shear walls and provide nailing schedules.

### Building Cross Sections

- 1. Provide typical wall sections showing typical framing conditions for this project. Show components of wall including finish materials, vapor barriers, and insulation.
- 2. Provide detail of top-wall lateral bracing @ a minimum of 8' o.c. for walls over 8' in unsupported length.
- 3. Show ceiling construction (size and spacing of joists) and R-value of insulation.

### Interior Elevations

- 1. Show full height elevation of second floor or mezzanine from finish floor to roof above.
- 2. Show all doors and windows. Provide window and door schedule for new and existing.
- 3. Provide an elevation through each stairway. Show rise, run, landings, handrails, and guards complying with IBC Sec. 1009, 1012 and 1013

### Ceiling Plans

- 1. Provide reflected ceiling plan. Show location of light fixtures.
- 2. Ceiling framing plans must show the size and spacing of ceiling joists.
- 3. Clearly detail required draftstopping in combustible construction. IBC Sec. 718.

- 4. Provide cross section of and lateral bracing detail for suspended ceilings. Standard ASCE-7.

### Fire Resistive Elements

- 1. Show that building elements comply with fire-resistive requirements of IBC Chapter 7.
- 2. Provide an architectural cross-section through the fire resistive construction and specify the Item Number from IBC Tables 721.1 (1), 721.1 (2) or 721.1 (3), the Gypsum Association File No. from the *Fire Resistance Design Manual*, or the UL Directories for all fire resistive assemblies, or other approved sources.
- 3. Provide sections and details of fire-resistive floor-ceiling and wall assemblies clearly detailing all fire-resistive construction. Provide sections and details showing that all required horizontal fire-rated assemblies are supported by structural systems having equivalent fire-resistive protection.
- 4. Provide details for parapets on fire-resistive exterior walls and area separation walls. IBC 704-5.11.
- 5. Specify ratings for doors and other openings in rated walls.

### Accessibility for the Disabled

Provide floor plans and elevations of sufficient detail to show that the building and site facilities are accessible to persons with disabilities per Chapter 11 of IBC & ICC A117.1

- 1. Plans must show an accessible route of travel throughout the building. An accessible route of travel is a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person using a wheelchair and is usable by persons with other disabilities.
- 2. Provide floor plans and elevations with dimensions for restrooms, kitchens, counters, and similar fixed facilities showing compliance with barrier-free access requirements.
- 3. Door schedule shall specify that door locksets and latchsets will have lever, push operated, or other devices operable by wrist or arm pressure.

- 4. In an existing building, to the maximum extent feasible, the accessible route to altered areas shall be made accessible. The accessible route means a continuous, unobstructed way of pedestrian passage by means of which an altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entry to the facility, and other parts of the facility. (This includes restrooms, telephones, and water fountains serving the altered area).
- 5. Provide a detail or note stating that accessible parking spaces will be identified by the International Symbol of Accessibility and the phrase "State Disabled Parking Permit Required." Such signs shall be 60 inches minimum above the floor of the parking space, measured to the bottom of the sign. The signs will be white on a blue background. 1101.2.6 (ICC A117.1, Section 703.6.3.1)

## Energy/Light/Ventilation

The plans shall show in sufficient detail all pertinent data and features of the building and the equipment and systems including but not limited to: design criteria, exterior envelope component materials, U-values of the envelope systems, R-values of insulating materials, size and type of apparatus and equipment, equipment and systems controls, light fixture schedules with wattages and controls narrative and other pertinent data to indicate compliance with the requirements of the 2015 editions of the International Building Code (IBC) and International Mechanical Code (IMC), and the International Energy Conservation Code as adopted and amended by the State of Washington

- 1. Non-Residential Energy Code Compliance Forms must be completed and submitted with permit application. They are available at [www.neec.net/energy-codes](http://www.neec.net/energy-codes)
- 2. The minimum requirements for operable area to provide natural ventilation required in the IBC shall be shown or indicate that a mechanical ventilation system(s) will be provided that is capable of supplying the minimum outdoor air quantities specified in the 2015 International Mechanical Code Section Sec. 403 to each zone.