

## **BUILDING PERMIT BASICS**

### **1. When is a building permit required?**

Typically new structures, additions, remodels, decks, stairways and other trade work (electrical, plumbing & mechanical) require building permits. For exempt work, see the “No Permit Required” handout on the City Website; [www.city.ketchikan.ak.us](http://www.city.ketchikan.ak.us), under the “Building Permit and Application Info.” title. For example, a deck that is less than 30” above grade or a utility shed that does not exceed 120 square feet in size require no permits. If you’re not sure whether or not your project requires a permit, please contact Building Division staff at (907) 228-4720, or (907) 228-4737. If a building permit is not required, a Ketchikan Gateway Borough (KGB) Zoning permit may still be required. Prior to beginning construction, contact the KGB Planning and Community Development Department at (907) 228-6610 for information.

#### **a. Why do I need a building permit?**

- ✓ Building permits help assure that buildings are constructed with safe and healthy practices for the protection of the occupants, neighbors, community and first responders.
- ✓ Plan review is part of the permitting process that helps identify unforeseen construction problems that might be overlooked prior to construction, saving time and money.
- ✓ The Inspection process helps ensure that minimum code is being met and construction practices are being followed; receiving a “Certificate of Occupancy” (C of O) after the final inspection reflects this. Note: in addition to the health and safety benefits that are provided to the owner or tenant, the C of O provides financial institutions with assurance of quality. These documents are required by the lending agencies for required financing.
- ✓ Stop Work notices, Code Enforcement action and potential penalties and citations can be avoided.

#### **b. How do I navigate through the building permit application process?**

First, a building permit application (Commercial or Residential) is required to be filled out completely. An application can be obtained from the same web page as this document or one can be picked up at 2930 Tongass Avenue, Second floor (Building Division). For your convenience, the application can be typed on and printed from this website. The completed application must be submitted to the Ketchikan Gateway Borough (KGB) Planning and Community Development office along with a Zoning Permit Application, plans and associated construction documents for Commercial and Residential projects. Once KGB Planning and Community Development have completed their review of the plans they will notify the City of Ketchikan Building Division staff that the plans are ready for Building Permit review.

#### **c. How long does the permit/plan review process take?**

The average residential permit is complete within six to ten working days from the time the Building Division Staff receives the submitted documents from KGB Planning and Zoning office.

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Commercial permits may take as long as sixteen working days. The plan review is part of the permit process. Complexity, completeness and the availability of review time based on previously submitted project dates are all factors in providing a timely turn around. Incomplete plan submittals may be returned in a short period of time when additional information is necessary for a proper review. Trade permits, such as electrical service upgrades, not requiring plan review will be expedited.

## d. What is the cost of a building permit?

**Residential (Single-Family & Duplexes - New, Additions and/or Alterations):** There is a single building permit (BP) fee for residential projects. Plan review (PR) fees will not be required. To determine fees, see Table 109.2.1 on page 2 of "Ordinance 19.04.010 International Building Code Adopted," which is found on the City of Ketchikan Municipal Code website page. **Example of a Building Permit fee:** If the project is valued at \$25,000.00, locate the \$2,000.01 to \$25,000.00 category under the "TOTAL VALUATION" column of Table 108.2.1. Just right of the chosen category (\$2,000.01 to \$25,000.00) is the "FEE" column. You will find a \$69.25 fee for the first \$2,000.00's of the \$25,000.00 valuation. Add a \$14.00 fee for each additional \$1,000.00 or fraction thereof over the \$2,000.00 figure and add this to the initial \$69.25 fee for a total permit price; Based on this table, the **\$25,000.00 project valuation** would be calculated as follows: \$69.25 (for the first \$2000.00) + (23 x \$14.00) = \$69.25 + \$322.00 = **\$391.25 (Building Permit Fee)**

**Commercial (Tenant Improvements/Commercial Additions):** There are two fees associated with commercial projects; a building permit fee and a plan review fee. The **plan review fee is determined at a rate of 65% of the building permit fee**, so the building permit fee must be determined first. Commercial building permit fees are determined from the same table identified above; Table 109.2.1. The building permit calculation for this section is identical to the residential section above. Project valuations may be different; just move up or down within the "Total Valuation" category to find your project's value location. **Example of a plan review fee:** If the building permit fee is determined to be \$650.00, then the plan review fee would be as follows: .65 (65%) x \$650.00 = **\$422.50**. The total permit fee would be determined by adding the plan review fee and building permit fee together; **\$422.50 + \$650.00 = \$1072.50 (total fee)**.

**New Commercial: (Includes Multi-Family - more than two dwelling units):** Project valuation for all new commercial structures requires that a regional modifier of 1.3 be used when determining a valuation for the purpose of permit costs. This 1.3 modifier is incorporated into the Building Valuation Data Table (Valuation Schedule) and is multiplied by the square foot cost of the proposed structure as determined by its occupancy classification and type of construction. Square footage values range from \$277/sq. ft. for a hospital facility with non-combustible construction to \$39/sq. ft. for residential accessory structures. **For example**, a 9,000 square foot, wood-framed (V-B construction type) office building (B-occupancy) valuation is determined as follows: **9,000 sq. ft. (Building area) x \$110.93 (Square foot value per Building Valuation Data table) x 1.3 (Regional Modifier) = \$1,297,881.00 (Project's valuation)**. With the valuation determined, use the proper category below, under the Fee Schedule. The two examples below will show the building permit fee, the plan review fee and the total fee based on the following fee schedule:

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## FEE SCHEDULE

\$1.00 to \$500,000.00 is based on a 1.5% cost (.015)

\$500,001.00 to 1,000,000.00 is based on a 1% cost (.010)

\$1,000,001.00 to \$5,000,000.00 is based on a .8% cost (.008)

\$5,000,000.00 and up is based on a .6% cost (.006)

**Example #1:** If a project's valuation were \$1, 350,000.00 then the Building Permit Fee would be  $.008 \times \$1,350,000.00 = \$10,800.00$ , Plan Review fee would be  $.65 (65\%) \times 10,800.00 = \$7,020.00$ , and the Total Fee would be  $10,800.00 + \$7,020.00 = \underline{\underline{\$17,820.00}}$

**Example #2:** If a project's valuation were \$350,000.00 then the Building Permit Fee would be  $.015 \times \$350,000.00 = \$5250.00$ , the Plan Review would be  $.65 (65\%) \times \$5250 = \$3413.00$ , and the Total Fee would be  $\$5250.00 + \$3413.00 = \underline{\underline{\$8663.00}}$

Note: Project applicant shall provide an estimated project valuation at time of application submittal. Material and labor costs must be incorporated within the total project valuation in order for staff to accept and process the permit application. If proposed valuations are underestimated as determined by the City Building Official, the permit application can be denied unless the applicant can show detailed estimates that meet the approval of the City Building Official.

## 2. Why start at the Ketchikan Gateway Borough Planning and Community Development office?

The City of Ketchikan Building Division and the Ketchikan Gateway Borough (KGB) Planning and Community Development (PCD) office have different responsibilities; they are not consolidated. KGB PCD has jurisdiction over planning and zoning, schools, and the economic development department. KGB PCD does not enforce building codes within the City of Ketchikan or within the Borough, but does regulate the building heights, setbacks, lot coverage and use per zoning designations within the City of Ketchikan. KGB PCD also ensures that new owners be added to the tax rolls during ownership changes. This allows the new owner to approve any modifications or improvements to their property by others. Both the City of Ketchikan and KGB PCD staff attend committee meetings periodically to discuss current and future projects within the City. Contact KGB Planning and Community Development Department at (907) 228-6610 for required information.

### a. What are the requirements for plans?

**Four sets** of plans and documents are required for all commercial projects; one of these four sets shall have an 18"x24" minimum size requirement. **Two sets** will be required for all residential projects. Plan sheets must be at the least 11"x17". If the plans are unreadable at this size, larger sheets will need to be provided. Plan requirements can be found attached to or printed on the back side of the Building Permit Application form. All plans and details must be scaled appropriately. Full dimensions may be appropriate for smaller projects.

### 3. Under which provisions does the Building Division plan review staff operate?

#### a. Residential:

Residential plan reviews operate under the most current codes and local ordinances: The *International Residential Code, 2012 Edition*; the *International Mechanical Code, 2012 Edition*; the *Uniform Plumbing Code, 2012 Edition*; the *National Electrical Code, 2011 Edition*; the *International Energy Conservation Code, 2012 Edition*; and Local Ord. 09-1638, Title-19. By adopting the most recent residential and energy codes, the City stays current with both, the State Statutes under the Alaska Housing Finance Corporation (AHFC) and the Local Homebuilders Association endorsement. Because of this adoption, the City of Ketchikan becomes an approved City under AHFC, which allows cost savings to homeowners who are considering financing through AHFC.

#### b. Commercial:

Commercial plan reviews operate under the most current codes and local ordinances: The *International Building Code, 2012 Edition*; , the *International Mechanical Code, 2012 Edition*; the *Uniform Plumbing Code, 2012 Edition*; the *National Electrical Code, 2011 Edition*; the *International Energy Conservation Code, 2012 Edition*; and Local Ord. 09-1638, Title-19. All commercial plan review is completed by the City of Ketchikan's Building Division and Fire Department staff. As Certified Building and Fire Officials, we were able to take on the plan review responsibilities of the State Fire Marshal. However, to remain independent of the State Fire Marshal's Office, the City had to adhere to the State Statutes and follow an auditing process every two years. This new checks and balance of the two organizations allows for a better service to the customer, one without additional delays.

### 4. Why are residential and commercial plan reviews so different?

A typical set of plans regardless of the type of occupancy should always include a site plan, floor plan, section details, elevations, foundation plan, specifications and so forth. The difference between a residential and a commercial plan is the design complexity and the familiarity with the building's surroundings. **Commercial** Plans specify exiting, accessibility, complex structural design and fire and life safety, which requires plans to be designed by a professional (architect and/or engineer), licensed and registered in the State of Alaska. **Residential** Plans are typically drawn in the conventional style, without the need for licensed professional designers. In a **Commercial setting**, the public is less familiar with their surrounding; however, in **Residential settings**, homeowners are usually quite familiar with their surroundings. **Commercial structures** may require fire-rated walls, paths of egress (exiting), directional exit signage, fire-sprinkler and fire alarm systems, adequate means access for the disabled, occupant load signs posted and other specific requirements necessary for the public safety. In **residential structures**, homeowners and tenants are typically familiar with window and door exit locations in the case of an emergency and the house is equipped with Smoke and Carbon Monoxide Detectors.

## 5. Who is allowed to draw up the plans?

### a. Can the residential applicant provide the requested information?

Yes, the residential applicant can provide this information; however, often times the information being requested exceeds the knowledge of the applicant. At these times, a professional opinion by a licensed contractor or a licensed and registered design professional may be necessary. The Building Division may aid the applicant by providing prescriptive methods allowed by code. However, as City of Ketchikan employees, we are not allowed to draw plans for the applicant.

### b. Is a licensed design professional required to respond to requested information?

Yes, the design professional is required to submit requested information in order to continue the plan review and building permit processes. Any change to the plans must be completed by the design professional of record based on Alaska's State Statutes. The Architects, Engineers and Land Surveyors Board, under these statutes, govern the activities of all design professionals and building officials.

## 6. How will I know when my building permit is ready?

If you are the applicant of the project and the permit is ready to issue, City staff will notify you by phone, post or email. The applicant can either be a homeowner, contractor or designer, depending on which individual submitted the permit application. If you are the owner, but not the applicant, you can contact Building Division staff at (907) 228-4737 or (907) 228-4720 for project's status.

Once the permit has been obtained, it must be posted on the job site, and a set of the approved plans must be made available to the building inspector during site inspections.

## 7. How will I know when to call for the required inspections?

All building permits are computer generated and identify several types of inspections. These inspections appear on the second page of your permit application. A stamp indicating **"Call for Inspection prior to cover"** is found adjacent to the required inspections. This request is very important to understand in terms of not covering up an installation prior to inspection. For example, pouring (placing) concrete prior to rebar inspection (foundation inspection) can be critical and costly for the owner or contractor. Covering up electrical wiring and plumbing within a wall prior to inspection is another example. The City Building Division reserves the right to reject any work which has been concealed without first having been inspected. Sometimes approving phases of construction by the opening of walls is necessary; this may be the inspector's only option in order for the project to continue. If inspection phases or times of inspection are not clear to the applicant, please contact Building Division staff at (907) 228-4720 or (907) 228-4737 for help.

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When requesting an inspection, we ask that you call at least 24 hours in advance and provide the following information: permit number, applicant name, project address, contact number, type of inspection and the associated plan sheet numbers if possible. This will allow the field inspector the time to organize and schedule their day efficiently. The permit and plans must be on site for the inspectors use.

## **a. Which inspections are required? (Commercial and Residential)**

**EXCAVATION AND BACKFILL:** Excavation and backfill for buildings, retaining walls and other structures must be inspected in separate stages- after organic materials have been cleared, after blasting and during fill operations. Contact staff in the Public Works Department regarding the “**Site Development Permit Application.**” A plan submittal checklist, fees and inspection requirements are found within the Site Development Permit document. Staff can be reached at (907) 228-4727 if you have any questions about the Site Development Permit process.

**SLOPE AND DRAINAGE:** Site drainage and the lot development will need to be inspected prior to any foundation work, in most cases. This inspection is directly related to the “Site Development Permit,” which is the responsibility of the Engineering Staff within the Public Works Department. Site drainage, connection to storm drain system and final grading all require inspection. Questions and inspection requests should be directed to the Engineering Staff at (907) 228-4727. There may be a requirement for an “Excavation Permit” through the Public Works Department. Civil or Geotechnical Engineers may be required in the larger commercial projects within the City.

**BURIED UTILITIES:** Below grade utilities such as: water lines, sewage waste lines, electrical/communication conduits and sprinkler lines must be inspected by the associated utility agency before back filling and compaction. Proper fill material should be available on site.

**FOUNDATION:** Prior to placement of concrete: all steel reinforcement, anchor bolts, hold down anchors and post anchors must be inspected. If anchor bolts, straps or post anchors will be wet set, they must be on site during foundation inspection. Driven pilings and other engineered foundations will be inspected per the “Site Development Permit” application guidelines. In addition, all setbacks from the perimeter of the foundation will be checked; dimensions from foundation to property lines and to other buildings on site will be verified. Note: established property lines must be identified prior to inspection; batter boards and string lines or other methods used to establish property lines must to in place for field inspector.

**FRAMING:** Framing inspection should be made after all electrical, plumbing and mechanical rough-in systems are in place. All straps, hold downs, framing anchors and other required anchoring systems must be visible. This also applies to exterior and interior shear walls. Structural elements that need to be covered prior to continuing construction may require interim inspection since multiple framing inspections are often needed for new commercial

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projects. Engineered structural components (ICC/ICBO approved) such as roof trusses, floor trusses (TJI, LPI, BCI) and foamed wall panels must be accompanied by the manufactures specifications and/or engineered plans.

**ELECTRICAL:** The rough-in electrical inspection should be performed after all wiring systems, including grounding, have been installed in approved boxes, cabinets, panels and service equipment. Electrical service inspection involves the meter box, disconnect, ground, and service mast. Receptacles, switches and other outlet devices should be installed only after wiring is protected by the drywall or other means. Conduit acts as protection to the wiring without drywall covering. Load distribution panels are checked for proper labeling, wire size, grounding, bonding and terminations. All receptacles are checked for polarity, ground-fault and arc-fault protection.

Large commercial and industrial projects may have an extended number of electrical inspections due to the large number of electrical panels, transformers, equipment disconnects and Voltage/phases.

**PLUMBING:** All plumbing shall be exposed during the rough-in inspection. Water lines, drain-waste-vent (DWV), fire-sprinkler lines, gas lines, exterior sewer lateral line and other types of plumbing installations must be inspected prior to covering. Water or air tests are required when checking for leaks.

**MECHANICAL:** During the rough-in inspection, all mechanical venting and ducting for associated equipment shall be in place. Fuel lines or hydronic-heat piping associated with the mechanical equipment shall also be completed. Air and water tests are required when checking for leaks.

**DRYWALL:** Gypsum board (drywall) that is part of a fire-resistance-rated assembly, a shear wall assembly or a draft-stop system is required to be inspected. Fire-resistance-rated assemblies with multiple layers will require more than one drywall inspection; typically seen in commercial applications. One inspection is typical for draft-stops and drywall-shear assemblies when applicable.

**INSULATION/VAPOR BARRIER:** Prior to installing drywall, all insulation and vapor retarders must be inspected. This may include pipe and duct insulation in unconditioned areas such as attics, under floors and wall cavities.

**OTHER:** **Commercial and Industrial projects** will require additional inspections: fire-sprinkler systems, fire-alarm systems, fire-life safety, hazardous/non-hazardous process piping, third-party special inspection & testing, accessibility and others. *Contact the Building Division staff for a complete list of additional inspections that might be encountered during the construction of these types of projects.*

## 8. Final Inspection and Occupancy

After all work has been performed and inspected per approved plans and all the equipment and appliances are operable, a request for final inspection can be made. All plumbing fixtures, electrical receptacles/switches and smoke detectors will be tested. Handrails and guardrails will be checked for safety and stability. In addition to these, siding, roofing, flashing, landings, doors, address numbers and decks will also be inspected.

Commercial projects require additional areas of inspection to be made, such as: Fire alarm system certification, special inspection documentation, Engineer final grading and structural observation approvals, accessibility to and within the structure and associated agency approvals. In addition, substantial letters of the project's approval will required from the design Architectural, Engineer, Electrical, Mechanical and Plumbing professionals.

Once the final approval is given, a Certificate of Occupancy (C of O) will be processed and approved by the City of Ketchikan Building Official. The C of O allows the building to be occupied. Occasionally a Temporary C of O will be issued under certain circumstances, prior to completion of work. Approval is at the discretion of the City of Ketchikan Building Official, but only if all Life-Safety considerations have been met to the satisfaction of the minimum code standards.

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## BUILDING PERMIT BASICS FLOW CHART

