Significant Changes

23.05 – Building Regulations

010. Adoption of codes. Code language is clarified to identify when codes are adopted by reference with local amendments (like the International Building Code which comes out with an edition every three years) and when they are written and adopted in full (like the Anchorage Administrative Code which is written in full by the department).

23.10 – Anchorage Administrative Code

103.4.4. Members, voting, and hearings before the building board. Building board makeup has been modified. General contractors on the board will move from four to two while additional members will move from two to four. This will allow other disciplines to bring in junior members to be on the board without the weight of being the only knowledgeable member on the board. The additional members was also expanded to include optional representation by fire protection engineer or contractor or an elevator contractor. Previously, there was not an option to have them on the board. While these disciplines are more difficult to fill for a regular seat, their expertise would be welcome when they are available to join.

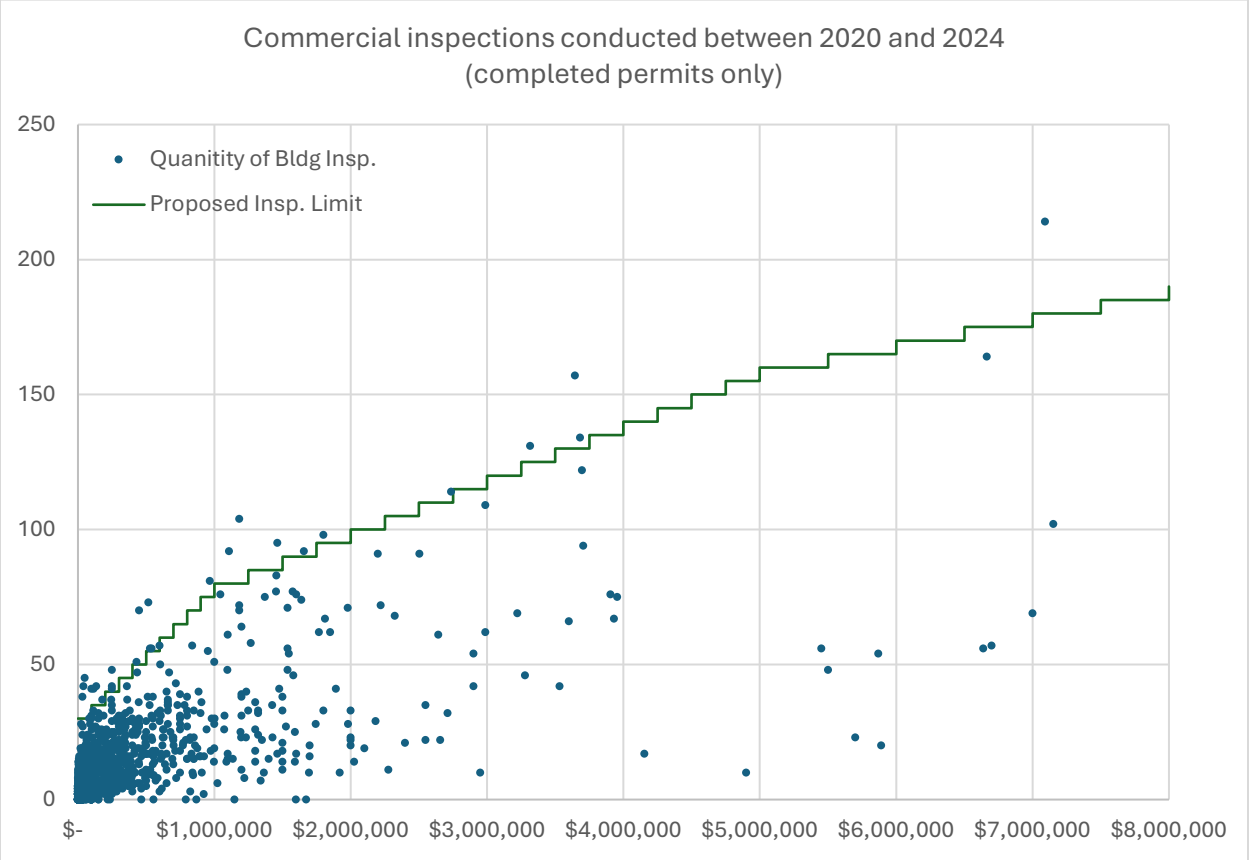
104.2.1. Building permit exemptions. The exemption for non structural repair has been extended from $5,000 to $10,000. The value has been set at $5,000 since at least the 2003 adoption of the Anchorage Administrative Code. Controlling for inflation, this comes out close to $10,000. This will cover repair of gypsum wall board, exterior siding, and smaller roofing projects that do not require structural modifications.

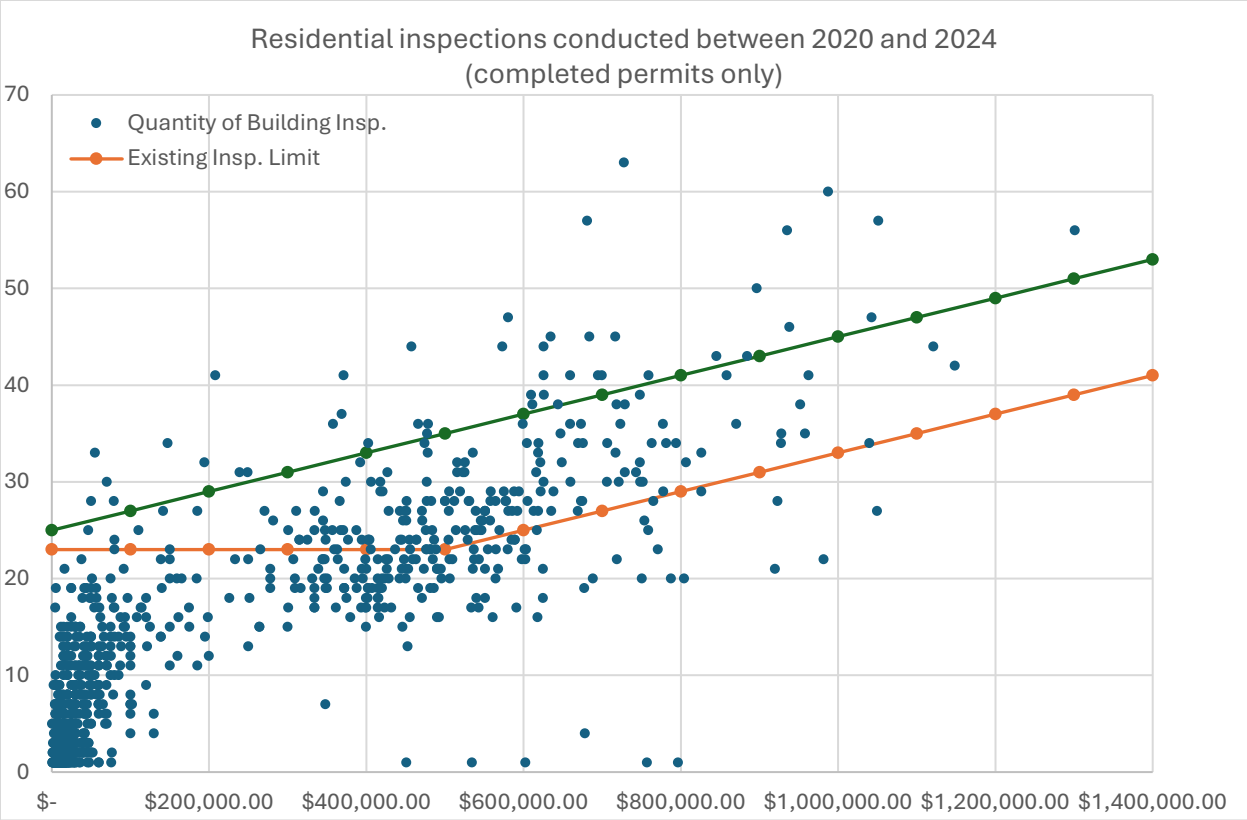
104.15. Mobile food units. and 104.16. Shelter units located in allowed camps. Both these items in the previous iteration of the code were listed as exempt from building permit, however the language further in clarifies they would still be required to seek a building permit, but under an electrical permit. The language has changed to clarify the intent, which is reduced building plan review and inspection, but this will still come in as a building permit.

109. Fines and fees tables. Residential permits were separated out from commercial permits in 2011 and created a limited number of inspections that are included with those projects. The updated fee tables will add a similar limitation to commercial projects now. Putting this limitation on commercial permits will allow us to extend the number of inspections we can offer on residential permits further so there will be less surprise fees associated with residential permits. This also allows us to double the number of inspections offered on retrofit permits for equipment placement; previously, re-inspections would double the cost of a retrofit permit, but now contractors will be able to make corrections without paying additional fees.

In reviewing commercial permits completed between 2020 and 2024, with the proposed quantity of inspections, 1% of permits valued at one million dollars or less would go over; and 8% of permits valued at $5,000,000 would go over. Whereas with the proposed change over the same period for

residential permits, the old inspection limits led to 20% of permits going over; the proposed inspections limit would drop this to under 5% of residential permits going over.





A reduced fee has been established for smaller scope projects valued at under $50,000. This includes a reduced building safety (inspection) fee which gets limited inspections for minor alterations, repairs, and decks as well as a 50% reduced plan review fee for repairs. This is to account for projects like reroofs where damaged structural framing is encountered, and the project has to become an alteration permit to repair the framing. The work for inspectors on such projects is usually limited and the plan review is typically like-for-like replacement making reviews simpler. This is an effort to make maintaining structures more affordable while maintaining building safety.

Fees associated with inspections for site work have been clarified. Previous code cycles, if there was a building permit, no additional fee was required for sitework inspections. However, occasionally, very small buildings will be designed where the valuation is low, but there is a lot of sitework involved. To capture these projects, we've clarified that an additional fee applies to fill and grade work for inspections for commercial building permits. This additional fee does not extend to plan review when there is a building permit.

23.15 – International Building Code

1006.3.4. Single exits. Current code limits the number of occupants on a floor to the number of exits provided; for instance, a single story office building can have up to 49 occupants with a single exit, while a second story would be limited to only 29 occupants with a single exit. This is due to the increased risk with getting people safely out of a building during an emergency such as a fire. There

has been interest, both locally and nationally, in extending this occupant limit for multi-family construction. Currently, the building code allows multi-family structures with maximum 4 dwelling units per floor to be built up to three stories above the exterior grade. This amendment, vetted both in the building code and fire code committee, will extend this up to a maximum of six stories, putting additional requirements on the initial construction. The Anchorage Fire Department was consulted on this amendment to determine a reasonable limitation that would still allow adequate access for fire personnel.

This exception would only apply within the Building Safety Service Area (not Eagle River, Girdwood, Chugiak, etc.), since those areas are subject to the State Fire Marshall, and they will only grant this exception where there is enhanced building plan review and inspections.

1608.4. Flat roof snow loads. The code has historically listed a minimum roof snow load for design purposes. With the adoption of this edition of the IBC, the code has updated the snow load data based on research completed by the University of Alaska Anchorage. This research effectively removes the need for a minimum snow load to be required, since the code now reflects the latest data. In most cases, the historic minimum will be met; and in specific instances, such as low risk storage structures, a reduced snow load can be used safely.

2303.4.6.1. Modification to TPI 1. With the historic snow falls received in Anchorage the last few winters, there has been increased scrutiny on pre-engineered metal plate connected wood trusses. Through site investigations of failed trusses and existing buildings throughout Anchorage, the capacity of the plates that connect trusses has been thrown into question. One engineering firm found that when inspecting the shop built trusses, issues with the metal plates pulling out was found at the shop where they are fabricated, once brought to the site, and again when finally installed in placed. To make sure these critical plate connections have additional residual capacity, a required fabrication tolerance of 20% is required on all truss over 30 feet in length. This means the plate connection will have 20% more capacity than expected, allowing for movement or displacement while it is being transported and installed.

23.20 – International Mechanical Code

802.10. Vent terminals – ice and snow protection. Previous versions of this amendment limited applicability to metal roofs of any slope; however, issues have been identified on steep pitched roofs also shedding snow and damaging vent terminals. This amendment adds asphalt shingle roofs with a pitch of 8/12 or higher to provide protection from ice and snow sliding, the same as for metal roofs.

1101.7 Changing refrigerant. Refrigerant has historically been a maintenance item for contractors to deal with, however with the introduction of A2L (mild flammability, versus the non-combustible and combustible counterparts), the national code added this as an item for code official review. To simplify this process and prevent an additional permit for maintenance item, the code was amended to remove the code officials role and focus on the contractor working with qualified engineer's or the equipment manufacturer when changing refrigerant.

23.25 – Uniform Plumbing Code

604.10. Plastic materials. Previous code cycles has limited the use of plastic materials for water service piping from the water source to the structures they serve. This is in line with Anchorage Water and Wastewater Utility requirements and includes an exception for specific piping approved by AWWU. This was extended more than 10 years ago to include private wells. In discussing at the code committee, the largest concern was for servicing if the pipes were to freeze. A local amendment exception was drafted to make sure structures that utilize plastic piping for their private well service will be of adequate size and accessibility to mitigate freezing issues if they arise.

908.2. Horizontal wet venting for bathroom groups. and 911.0. Circuit venting. Horizontal wet venting and circuit venting were removed by local amendment; previous code committees had decided this was too complicated to achieve in field. The latest code committee believes contractors can successfully install wet venting as long as a schematic is provided to the reviewer or inspector for approval. They also believe circuit venting can be executed correctly provided engineering design. This will allow more opportunities for solutions to plumbing problems that will help bring down the cost of construction.

1208.4.2. Medium pressure gas. Through coordination with Enstar Natural Gas, the options for medium pressure gas connections is extended to press-connect fittings; this allows more options for construction where previously only welded was allowed.

1210.3.6. Piping under exterior decks, porches, and walkways. Gas piping located under exterior stairs and decks are exposed to a highly corrosive environment; high humidity and often dusted with ice melts, these pipes will corrode and lead to many callouts by the gas utility to fix them. With the deck often being located close to the ground, this can lead to the deck needing to be partially demolished to gain access to the piping. This code amendment will still allow people to have gas fed outdoor fire pits, but will make their construction more resilient by requiring the use of corrugated stainless steel tubing (CSST).

23.30 – National Electrical Code

210.52(C)(2). Island and peninsular countertops and work surfaces. The original code requires a receptacle outlet at islands and peninsulas in the first 9 square feet and then again every 18 square feet along with one within 2 feet of the end of a peninsular. Previous code cycles simplified to a linear dimension, but still required more receptacle outlets. This code cycles amendment seeks to simplify further and only require a single receptacle outlet.

210.52(J). Parking spaces. This local amendment requires parking spaces of dwelling units to be provided with a duplex receptacle outlet, minimum one per dwelling unit. This is typically used for block heaters to be plugged in. The exception previously only allowed reduction for eight-plex and greater to reduce the number of outlets by the number of units that had indoor parking. The updated version changes to nine-plex and greater, but allows a 50% reduction in the number required or the total number of parking spaces, whichever is greater.

The conductors used for the required duplex receptacle outlets shall be 10 AWG copper minimum. This code cycle, the requirement to rough-in an electrical circuit for a future EV charging station was removed, so this simple increase in wire size will allow the duplex outlet to be changed in the future to a Level 2 charging station. There will still be a requirement under **220.57** (Electric vehicle supply equipment load) that will make sure the panel can support the load for an electric vehicle, which means the owner would effectively only need to change the receptacle and the breaker.

508. Lift stations. NFPA 820 provides language on installation of lift stations, however specific instances were identified that NFPA 820 did not cover. This amendment simplifies the requirements for lift stations that may not fit within the scope of NFPA 820.

23.45 – International Fire Code

108.2. Schedule of permit fees. It was requested that the fees for fire inspections be removed from AMC 10.75 and be placed in the fire code.

915. Carbon monoxide detection. The new national level code language has made an amendment unnecessary, so it has been removed.

1103.7.7. Group R-3 assisted living and custodial care facility. and 1103.5.7. Group R-4 and I-1 care facilities. Additional guidance has been needed where assisted living facilities are not able to meet the requirements of code. The fire department has developed alternatives in specific cases to assist these facilities to remain operational and reduce how often it is required to displace residents that can't meet the evacuation requirements. This has allowed more residents to remain in place while providing safeguards for their safety and wellbeing. This can be seen in the above amendments listed as well as **403.12.3.1** and **403.13.3.2**.

23.60 – International Energy Conservation Code

Table C402.1.2. Opaque building thermal envelope assembly maximum requirements, U-factor method. and Table C402.1.3. Opaque building thermal envelope insulation component minimum requirements, R-factor method. The insulation value used in the Anchorage amendments has typically been reduced from the IECC codes value for Climate Zone 7. This has been to help with construction costs; where Climate Zone 7 should utilize R-20 batt insulation (2x6 walls with insulation filling the voids) and R-4 continuous insulation (1" of rigid insulation applied to the exterior), our local amendments have kept it to only requiring the batt insulation. This leads to an overall reduction in cost, because there are additional trades involved to install the insulation and siding that would not be required when finishing with T1-11 plywood siding. For example, the cost for a house is approximately $200/SF. The additional trades on a 1500 SF single family house could cost up to $16/SF more, or an 8% increase in construction cost. With the current energy climate, the committee felt strongly we should advocate for additional energy savings, but did not want to increase the cost burden on new construction. Therefore, the values we've historically used (close to what is required for Climate Zone 4, like Seattle) is still an approvable minimum, but the

enhanced (what is required to meet Climate Zone 7) will still be listed for owner's interested in reducing energy consumption.

C402.6.2. Air leakage compliance. The residential building code has had a requirement since the 2009 edition to complete an air leakage test on the building's thermal envelope. Title 23 previously had local amendments to remove this requirement by effectively tying to the commercial building code, until the 2018 edition where we adopted energy requirements separately for residential construction. At that time, the requirement for testing air leakage was aligned with the Alaska Housing Finance Corporations building codes. This was not specifically enforced by the building department, but has typically been handled by owner financing, where the owner will get better rates when they can get a specific energy rating. In the 2024 edition of the IECC, commercial projects are now being required to test for air leakage. The committee felt this was an appropriate measure to make sure new buildings are energy efficient, so no amendment was made to this section. This does not directly effect change of use or alterations.

C405.15. Renewable energy systems. This code cycle at the national level, the energy code has added mandatory renewable energy systems for commercial projects. This could be accomplished by on-site or off-site renewable energy. The committee felt that renewable energy, at this time, should be a voluntary upgrade owners can make, so the section was removed in its entirety.

C503.1. General (alterations). To increase the ability to complete maintenance and alterations to existing structures, the list of exemptions to increasing the R-value during an alteration was increased. While ideal to increase insulation during a renovation where drywall is removed, the committee determined it wasn't reasonable to require this update as long as insulation already exists in the cavity.

C505. Change of use or occupancy. The code at the national level added a requirement to upgrade the building thermal envelope when a change of use creates an increased energy use intensity rank or stays at the same intensity rank. The committee felt this was overly conservative, so it was modified to only apply to an increase.

23.65 – International Existing Building Code

304.4. Additional permit requirements for reroofing. Requirements for reroofing were enforced through a department policy. During the 2018 code adoption process, the requirements related to existing rooftop insulation being increased were added to the code. When a roof has higher insulation value, it is more likely to retain snow load longer. Some older roofs relied on the snow melting to prevent overloading the structural framing. This amendment requires the contractor/engineer to consider this during the reroof to verify the roof can support a full design snow load. An assembly ordinance changed this to only look at buildings constructed prior to 1970, but what the committee found is the issue is not limited by an age of construction; owner's have come in complaining about excessive deflection and having to shovel their roof after having a reroof completed when they never had to in the past. This committee determined there should not be an age of construction limit on reroof requirements.

23.75 – ASME A17.1 – Safety Code for Elevators and Escalators

2.7.6.2. Location of machinery spaces and control spaces. For elevators to not utilize a machine room (machine-room-less or MRL elevator), the elevator industry has moved the control space inside of the hoistway of the elevator itself. This has required elevator installers, inspectors, and maintenance personnel to climb on top of the car to access the control space of the elevator. This is a dangerous area to work in and to minimize the risk of injury and the amount of time elevator personnel spend within the elevator shaft, this local amendment effectively requires the control space to be outside of the hoistway. This can be achieved by rotating the panel to be accessed from inside the elevator lobby. Other jurisdictions like New York City and the state of California have similar requirements for MRL elevators.

8.6.4.24. Systems to monitor and prevent automatic operation of passenger and freight elevators with faulty door contact circuits. The requirements for providing Door Lock Monitoring protection on both new and existing elevators appears in the 2022 edition of this code and this requirement addresses the most dangerous situation riding passengers could encounter with an elevator, which is the elevator moving within the hoistway with either a hoistway door or the car door not in its fully closed and locked position. This requirement would most likely require a full modernization or controller replacement on older elevators not already equipped with this protection and therefore this proposed amendment adds this retroactive requirement to the 2019 edition of the code and begins an extended period for compliance that should be provided so to allow equipment owners the opportunity to budget for the necessary modifications to their elevator system. A similar requirement is included in **8.6.5.19**.

23.75 – ASME A18.1 – Safety Standards for Platform Lifts and Stairway Chairlifts

2.7.1. Travel distance. This amendment will allow vertical platform lifts to be installed in more residential structures that have a rise greater than 14 feet; if the manufacturer has test data or reports to support these lifts going higher, the committee would like to see them be utilized. This will make installing lifts in residential properties more affordable.

23.85 – International Residential Code

R302.3.1. Dwelling unit separation. This amendment will allow a reduced fire separation for a dwelling unit added to an existing single family home or townhouse when it meets specific requirements like limited size and interconnected smoke detectors. This is to allow more modifications to existing dwellings to increase density without creating additional roadblocks. When a second unit is greater than 1200 square feet or will have separate smoke detectors, the proper fire separation will be required. This does not apply to new construction where the required separation is achievable due to the access provided.

R304.1. Location required (Protection of wood and wood-based products against decay). Wood decks have historically been required to be preservative treated, due to the potential for decay. However, local lumber yards don't keep all sizes of preservative treated lumber in stock. This can

cause delays in construction when the contractor needs a special order member; they may order it late or use it in the wrong location or even cut it short and then they don't have the right material on site to replace it. The committee developed an alternative to pressure treating the wood by painting, applying ice and water shield, and capping the members. This is not done in other locations nationwide, but the committee felt this would adequately protect a non-preservative treated wood member.

N1102.5.1.3. Maximum air leakage rate. The requirement to provide an air leakage test for residential construction has been in the code, but we have previously allowed an air leakage rate up to 4 air changes per hour. At the building board, members discussed Alaska Housing Finance Corporation finding that over 90% of houses were testing at 3 air changes or less per hour. The building board recommends changing to 3 air changes, since it has been proven achievable on new construction with current best practices.

23.110 – International Fuel Gas Code

411.1. Connecting Appliances. Appliances rigidly piped (particularly hanging unit heaters/furnaces) lack flex relief from earthquake movement. The serving gas supplier encountered countless rigid piping installations post the 2018 earthquake that had either loosened the union serving the appliance or sheered the appliance gas piping entirely. This amendment requires flexible connectors to be utilized for appliances when they aren't otherwise restrained against lateral (seismic) movement.