



# CITY AND BOROUGH OF SITKA

A COAST GUARD CITY

## MEMORANDUM

**To:** Mayor Eisenbeisz and Assembly Members

**Thru:** John Leach, Municipal Administrator 

**From:** Patrick Swedeen, Building Official 

**Date:** August 2, 2022

**Subject:** Updating City and Borough of Sitka's adopted building codes.

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### Background

There are two main driving forces behind the decision to update the City and Borough of Sitka's (CBS) adopted building and life safety codes at this time: 1) the CBS's Building Code Effectiveness Grading Schedule classification through the Insurance Services Office and 2) maintaining the CBS's deferral from the Alaska Fire Marshal's Office.

### Analysis

- The Insurance Services Office (ISO) Building Code Effectiveness Grading Schedule (BCEGS) classification:

Studies have shown that municipalities with well-administered, up-to-date building and life safety codes typically experience lower rates of insurable damages. CBS's ISO rating through the BCEGS classification provides insurance providers with a measurable metric regarding building and life safety code adoption and administration that insurance companies can utilize when determining property insurance rates.

The ISO regularly assesses the nearly 20,000 jurisdictions that it covers to ensure appropriate BCEGS classification, the ISO contacted the CBS several months ago to initiate the next regularly scheduled reassessment of Sitka's BCEGS classification.

A few of the over 1,000 data points collected and measured by the ISO include: number of staff tasked with code administration, staff training and certifications, allocated budget, number of development permits issued, number of inspections performed, and the age of the building and life safety codes adopted by the jurisdiction.

The CBS scores well on most of the data points analyzed, however our currently adopted 2012 International Building Codes are so outdated in the eyes of the ISO that one data point alone will automatically default our BCEGS classification to the lowest possible rating. This could have a negative impact on the cost of insurance rates for property owners in Sitka, both private and commercial.

- Alaska Fire Marshal's Office Deferral:

The City and Borough of Sitka carries a deferral with the Alaska Fire Marshal's Office (AFMO) authorizing the CBS to perform in-house the state-required construction plan reviews along with building code-required permits and inspections for commercial development in Sitka (the AFMO provides plan review services only). This allows us to provide plan reviews and building code assistance to our developers in-person utilizing local knowledge and expertise, enabling us to serve the citizens of Sitka with qualified and professional service that is much more personable and accessible than would be available from the AFMO.

Sitka's deferral also authorizes CBS staff to perform state-required Fire and Life Safety Inspections of our commercial buildings and local fire protection systems. This allows us to provide open lines of communication and local understanding in the administration of these duties when working with Sitka's commercial property owners to address identified life safety issues.

In order to maintain Sitka's Alaska Fire Marshal's Office deferral the CBS must demonstrate that we are able and qualified to perform plan reviews and Fire and Life Safety Inspections for commercial construction in Sitka to at least the same level of expertise as the AFMO. We must also adopt and administer building and life safety codes that are not older or less restrictive than the codes adopted by the AFMO.

The AFMO is on-track to adopt the 2021 International Code cycle sometime in the next few months, in order to ensure our deferral is maintained in good standing the CBS should adopt these updated building and life safety codes in anticipation of the state's adoption.

In addition to adopting up-to-date building and life safety codes this proposed Ordinance includes general housekeeping measures to improve the clarity and readability of Chapter 19 and a few substantive amendments to the building and life safety codes as currently adopted. A narrative of substantive proposed code amendments is attached to this memorandum.

### **Fiscal Note**

The changes proposed by Ordinance 2022-20 do not include an increase to the CBS budget.

The administrative costs associated with this proposed ordinance are limited to the staff time that has been dedicated to drafting, reviewing, and editing these proposed code updates, memorandums, and narrative.

Maintaining Sitka's positive ISO classification and Alaska Fire Marshal deferral helps reduce the costs associated with property insurance, development plan reviews, and

required construction inspections thus benefitting Sitka's developers, business owners, and property owners.

**Recommendation**

It is recommended that the Assembly approve Ordinance 2022-20 to maintain our Insurance Services Office Building Code Effectiveness Grading Schedule classification and Alaska Fire Marshal's Office deferral.

Encl: Substantive Changes to Chapter 19 Narrative  
Ordinance 2022-20

## **Substantive Changes Proposed to Chapter 19 in 2022 Adoption**

In addition to adopting the most-current editions of the applicable building and life safety codes the adoption of this proposed Ordinance will also result in the following substantive changes to SGC Chapter 19:

### **International Building Code:**

- **Delete SGC Section 19.01.041.**
  - This deletion from the SGC removes an inconsistency in the adopted code.
  - Deletion of this section of SGC will allow the application of an exception in the IBC that provides less restrictive requirements regarding fire-resistive assemblies separating dwellings and/or sleeping units in apartment buildings and hotels that are protected by a full-coverage automatic fire sprinkler system.

### **International Existing Building Code:**

- **New SGC Chapter 19.01A, adoption of the International Existing Building Code.**
  - This is not technically a substantive change to the adopted code, but it may appear to be.
  - In the currently adopted edition of the IBC, Chapter 34 provides allowances and additional compliance options when performing alterations to existing buildings when a Building Permit is required. In the 2021 code cycle IBC Chapter 34 has been removed and the International Existing Building Code replaces it. The requirements and allowances provided by IBC Chapter 34 have not substantially changed, rather further clarification has been provided through the “new” separate International Existing Building Code.
  - The Alaska Fire Marshal’s Office will be adopting this code.
  - The amendments proposed in 19.01A are in line with and are intended to maintain the amendments of other adopted codes.

### **International Mechanical Code:**

- **New SGC Section 19.04.035, crawlspace return air openings.**
  - This amendment will remove from the IMC verbiage that allows openings between crawlspaces and occupied spaces in commercial buildings.
  - The code as written permits openings directly between crawlspaces and occupied spaces, traditionally for furnace room combustion air and in more recent code cycles also for alternate crawlspace ventilation.
  - This configuration is problematic in our climate and we have many buildings in Sitka that have issues due to poor air quality as a result.
  - Previous Building Officials have not allowed the use of this type of installation.

### **International Fire Code:**

- **New SGC Section 19.05.060, safety precautions and devices.**
  - This new section of code will provide us with straightforward language to clarify the requirement for 120-gallon “pickle barrel” liquid propane tanks to be secured against movement during an earthquake.
  - Restraint requirements for liquid propane tanks and compressed gasses in general are found in various separate sections of our adopted codes and referenced standards, these requirements vary based on size and use of the tank. Some of these requirements specific to LP cylinders less than 125-gallons in capacity include:
    - NFPA 58 requires such tanks to “be installed aboveground set upon a firm foundation or otherwise firmly secured” and to “not be in contact with soil”.
    - The IFC requires compressed cylinders to “be secured to prevent falling caused by contact, vibration, or seismic activity”.
  - We are often queried regarding requirements for anchoring these commonly-installed tanks and it is the intent of our adopted building and life safety codes to require them to be secured against seismic activity but unfortunately the code language isn’t as clear as it should be. This new section of SGC will help us answer these questions regarding securing of propane cylinders simply and clearly.

### **Uniform Code for the Abatement of Dangerous Buildings:**

- **Delete SGC Sections 19.06.020 and 19.06.030 amending the UCABD board of appeals.**
  - These SGC deletions will revert the UCABD Board of Appeals back to the building code-intended body of appointed members qualified by experience and training to pass upon matters pertaining to building construction as established by SGC 19.01.010.
  - The Assembly has the authority to grant a variance or waiver to actions performed under the UCADB through the application of SGC 19.01.015.

### **International Residential Code:**

- **New SGC Section 19.09.019, OSB sheathing.**
  - This amendment will provide additional clarification regarding the use of Oriented Strand Board (OSB).
  - In the 2018 update to SGC Chapter 19 it was the intent of the Building Official at the time to prohibit the use of OSB as structural sheathing in all new construction due to its inability to maintain structural integrity once wet through the adoption of SGC 19.01.110.
  - We have been administering the code as the 2018 amendment intended, however it has recently been brought to our attention that technically this requirement was not reflected in the International Residential Code as it should have been.

- **New SGC Section 19.09.027, garage egress door.**
  - This new section of code will provide us with language clarifying the requirement for a code-complaint egress door serving residential garages.
  - The IRC requires an appropriately-sized and installed egress door providing an appropriate means of egress from all occupiable spaces, however the wording in the IRC is not as clear as it should be regarding garages.
  - This is not a change in code requirements, rather this addition will provide clear language enabling us to appropriately administer the existing requirements of the IRC.
  
- **New SGC Section 19.09.067, crawlspace return air openings.**
  - This amendment will remove from the IRC verbiage that allows openings between crawlspaces and living spaces in one and two-family dwellings.
  - The code as written permits openings directly between crawlspaces and living spaces, traditionally for furnace room combustion air but more recently also for alternate crawlspace ventilation.
  - This configuration does not work well in our climate and we have many homes in Sitka that have health issues due to poor air quality as a result.
  - Previous Building Officials have not allowed the use of this type of installation.

**Mechanical Code for Islands:**

- **Amend SGC Section 19.11.010, adoption of Mechanical Code for islands.**
  - The IMC applies to commercial construction only and does not apply to one and two-family dwellings.
  - Per Alaska statute commercial construction must be reviewed to at least the standards adopted by the Alaska Fire Marshal's Office, to ensure our ability to do so we should adopt the IMC in a similar fashion for application to island construction.

**Building Code for Islands:**

- **Amend SGC 19.14.010, adoption of building code for islands.**
  - The IBC applies to commercial construction only and does not apply to one and two-family dwellings.
  - Per Alaska statute commercial construction must be reviewed to at least the standards adopted by the Alaska Fire Marshal's Office, to ensure our ability to do so we should adopt the IBC in a similar fashion for application to island construction.