



Memorandum

TO: The Honorable Whatcom County Council
The Honorable Satpal Sidhu, County Executive

FROM: Curtis Metz, Building Services Division Manager
Cliff Strong, Senior Planner

THROUGH: Mark Personius, Director, Planning and Development Services

DATE: January 29, 2021

SUBJECT: Adoption of the International Building, Fire, & Associated Codes

Purpose

As required by RCW Chapter 19.27, to adopt by reference, with certain amendments, the Washington State Building Code Council approved versions of the:

- 2018 International Building Code
- 2018 International Existing Building Code
- 2018 International Swimming Pool and Spa Code;
- 2018 International Residential Code
- 2018 International Fire Code
- 2018 International Mechanical Code
- 2018 International Fuel Gas Code
- 2018 Uniform Plumbing Code
- 2018 Washington State Energy Code
- 1997 Uniform Code for the Abatement of Dangerous Buildings
- And certain Americans with Disabilities Act provisions

Each of these has certain amendments, exclusions, and/or appendices proposed for adoption (or exclusion), and a complete referenced list is found in Exhibit A, §15.04.010 (Adoption of Referenced Codes).

Background

Every three years the International Code Council updates the international building and related codes to provide updated information, code language, and changes to previous codes to provide a reasonable level of safety, public health, and general welfare through structural strength, means of egress, sanitation, adequate light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment. The updated codes are released and publicized by the ICC on the 1st of January every code cycle year. The codes are then reviewed and amended by the Washington State Building Code Council, a process taking approximately one year. The Washington State Amendments are then released and publicized around the 1st of January and then scheduled to be adopted on the 1st of July of that year. These codes and amendments are required to be adopted by the cities and counties per RCW 19.27 and go into effect the date designated by the State Building Code

Council. The cities and counties follow suit and have their amendments to the new codes adopted at the same time or as close as possible of the effective date of the new codes.

However, the 2018 codes have taken a slightly different path. The typical adoption date of July 1, 2019, was pushed back to July 1, 2020, by the State Building Code Council (SBCC). On April 2, 2020, by Proclamation 20-40, the Governor extended the code effective date from July 1, 2020, to November 1, 2020. On June 26, 2020, the SBCC extended the code effective date to February 1, 2021. On January 15, 2021 there was a motion passed by the SBCC to move the adoption date back again to July 1, 2021. This was followed up by public announcements from the BIAW, BIAWC, and the Washington State Energy Code Council. On January 19, 2021, this motion was repealed by Governor Inslee, and the adoption date was moved back to February 1, 2021.

During this past winter, during the COVID-19 pandemic, the Washington State Energy program has been creating and publishing online trainings and webinars available on their WEB site for training. They have also updated all the energy code worksheets and compliance check sheets to the 2018 codes, which support the adoption date of February 1, 2021.

The 2018 Codes, including the 2018 Washington State Energy Code, therefore went into effect on February 1, 2021. However, cities and counties can amend the administrative provisions of the 2018 Codes to suit their particular operational or procedural needs.

Proposed Whatcom County Title 15 Amendments to the 2018 Codes

Clean-Up & Reorganization

Most of the amendments to Title 15 have to do with cleaning it up. There's a lot of outdate references, text, position titles, bad grammar, etc. The main cleanup changes are:

- **Definitions** – We have moved all definitions to one section (15.04.012). We did this because there were multiple locations of definitions of the same word and in some instances defined differently. Staff has been slowly (as we progress through various code amendments) moving all definitions of each title into one section, with the long-term goal of creating one chapter or title for all WCC definitions so that they can be made and kept consistent across the all the codes. This way if a definition needs to be updated it only needs to be updated in one spot.
- **IFC Appendix B** – Appendix B of the International Fire Code, as currently adopted, is an almost total re-write; only five short sections (paragraphs) of the original appendix has been maintained. However, users have to go back and forth between that appendix and our code to see what actually applies. We have now just incorporated those few sections into our own modified version of Appendix B and are proposing to adopt it in its entirety.
- **Whatcom County Development Standards (WCDS)** – Title 15 currently contains certain descriptions of measurements, geometrics, and exhibits for roads and emergency apparatus access. However, there have been amendments to the WCDS that were not amended in Title 15, which has created inconsistent standards. To ensure consistency, we are proposing to delete these actual standards from Title 15 and just refer to the "Whatcom County Development Standards and Drawings, Chapter 5 (Roads & Related Work)."

We are proposing a couple of policy changes, though:

- **Tiny Homes Definitions** – Council has expressed an interest in amending our codes to better allow for tiny homes. The 2018 IRC has addressed the topic of Tiny Homes by creating Appendix Q which provides requirements on minimum construction sizes and clearances to maintain fire and life safety features. Though most changes will come through amendments to Titles 20

(Zoning) and 21 (Land Division) later this year, we are adding definitions of tiny homes to Title 15 so that the terms will be synonymous between all codes.

- **SFR Openings in Fire-Rated Walls** – We have added a new exception to IFC Appendix B, §B105.3 that allows one opening in a fire-rated wall that is constructed to reduce fire areas in order to reduce fire flow requirements as regulated by the IFC. Single family residences (SFRs) require fire flow of 500 GPM @ 20 psi for 1 hour when they exceed 4,000 sf. If there is no fire hydrant available that meets these requirements, the fire flow requirement can be reduced by 100% if an NFPA 13-D automatic sprinkler system is installed throughout the entire building. As the code is written now, once the size of the structure exceeds 8,000 sf it would require sprinklers throughout and fire flow would be required as stated in Table B105.1 of the IFC. If a hydrant is not available to meet the fire flow requirements, a water tank, pump, and hydrant would need to be constructed on-site. To mitigate the cost of constructing a fire flow system, a 2-hour fire-rated wall can be constructed within the SFR to create two “separate” buildings with calculated fire flow areas of less than 8,000 sf. For SFRs, this wall is typically constructed between the garage and living space. According to the IFC no such openings are allowed in fire walls constructed to reduce fire flow areas to create two separate buildings. This requirement makes sense when talking about industrial, commercial, public, or other buildings where the general public is allowed. However, an SFR is typically less hazardous than such buildings, does not have the general public present, and the occupants are familiar with their surroundings, thus greatly reducing the potential for the loss of life in this type of structure. The IBC allows fire-rated openings in fire-rated walls that separate buildings or occupancies, but does not address fire flow requirements. Using construction requirements from the IBC to construct fire-rated openings in fire-rated walls, we are proposing this exception to address some of the larger homes we have in Whatcom County. We are proposing only one opening be allowed and have capped the size of the entire building to 10,000 sf as the fire flow requirements increase above that size.

Staff Recommendation

Staff recommends that the Council adopt Ordinance No. _____, amending WWC Title 15 (Building & Construction) to adopt the 2018 International Building and associated Codes, as amended, as shown in Exhibit A of the ordinance.