



# AO 2020-85: Adoption of Updated Building Safety Codes

By Bob Doehl  
Building Official

Brian Dean  
Fire Marshal

Assembly Work Session  
October 21, 2020

# PROPOSED EXEMPTION OF SINGLE FAMILY AND DUPLEX FROM IFC 507.1 FIRE PROTECTION WATER SUPPLY



- State Pre-emption: **13 AAC 55.030: (c)** No local political subdivision may set minimum standards that are less stringent than those set out in 13 AAC 50 - 13 AAC 55 unless that action is approved in writing by the state fire marshal after receipt of justification from the local jurisdiction.
- Exemption Creates Lower Standard Requiring SOA Approval: **13 AAC 50.025:** *International Fire Code 2012 Edition (IFC)* is adopted to regulate all occupancies and buildings
- Resolution Process
  - Amendment sent to SOA as written justification for lower standard
  - At risk building permits issued when exemption is relevant until resolution
  - Conditional Certificates of Occupancy issued until resolution

# PROPOSED LOCAL AMENDMENT IFC 507.1 FIRE PROTECTION WATER SUPPLY

Responsible development includes accounting for fire protection water supply

The proposed amendment does not require sprinklers to new homes built more than 600 feet from a fire hydrant. It provides an additional option 3 existing provisions.

1. Extend public water utility supply (IFC 507 & Appendix B)
2. Provide an NFPA 1142 compliant private water supply system such as a reservoir, drafting site, or private hydrant system (IFC Appendix B103.3)
3. Construct homes in accordance with the International Wildland-Urban Interface Code (WUI) which involves defensible space and ignition resistant construction (IFC Appendix B103.3)
4. Provide automatic sprinkler system

Sprinkler systems are reliable and have a proven track record of both saving property and lives.

# SPRINKLERS SAVE LIVES & REDUCE PROPERTY DAMAGE

92% of all civilian structure fire deaths resulted from home fires

85% lower risk of dying where sprinklers are present (NFPA)

90% of the time a single sprinkler activation was sufficient to control the fire

97% of the time sprinklers contained the fire to the room of origin

71% reduction in property damage in structures with fire sprinklers

- Statistic sourced directly from the records of the National Fire Protection Agency

## SPRINKLERS SYSTEMS ARE RELIABLE



Over 4000 sprinkler systems in Anchorage, only 200 experienced damage in the recent 7.1 earthquake

AFD received no notifications of damaged residential systems

Alaska averages 1000 earthquakes each month with 45 reaching magnitude 5 to 6 each year\*. Alaska also has a lot of sprinkler systems & they are designed for Alaska's known seismic activity. \* Alaska Division of Geological & Geophysical Surveys

Residential sprinkler systems use CPVC or PEX piping and are no more prone to failure than modern residential plumbing.

# Electric Vehicle Rough Ins

- Will save homeowners time and money
- Prevents “creative” solutions/facilitates other uses
- AO follows NAHB-endorsed adoption path of NEC!
- Electric vehicles are coming and we need to be ready

## Top stories



**electrek**

GM announces \$2 billion for electric vehicle factory in Tennessee, will build Cadillac LYRIQ a...

12 hours ago



**NBCNEWS**

GM charges up its electric vehicle program with \$2B investment in Tennessee plant

8 hours ago



**CNN**

GM to invest \$2 billion in Tennessee factory so it can build electric vehicles

7 hours ago

## Revised Language for EV Ready Rough In

23.30.210.52: **Electric vehicle (EV) charging rough-in for detached one- and two-family dwellings and townhouses.** Detached one- and two-family dwellings and townhouses require a minimum of one EV charging rough-in per dwelling unit. The rough-in shall include an adequately sized conduit or cable wiring method terminated in a J-box with cover. The panel shall have sufficient space and capacity to feed a 50-amp circuit with 9.6 KVA EV load. The outlet shall be located inside a garage when the dwelling is served by a garage, otherwise, the outlet shall be located adjacent to onsite parking. **The spare load capacity required by this amendment shall not require the capacity of the service, feeder or panel to be larger than 200 Amps. A load calculation or demand KW history per the NEC is required to verify adequate capacity is available for the electric vehicle charger at the time of the charger installation.**

# Third Party Review Audit Program

- Four Goals
  - Supports continuation of the Third Party Review program
  - Fulfills our obligations for building safety to the public
  - Provides quality assurance tool to industry while maintaining status quo similar to previous onsite effort
  - Counter basis for unrated BCEGS score for residential construction
- Currently Underway
  - Setting up meetings with certain reviewers under existing authority
  - Significant issues of misrepresentation and reviewers doing design work
- Process
  - Random 5-8% of third-party review permits subject to audit
  - Audit entails third-party reviewer providing full basis, including calculations, for approval
  - Will not delay permit issuance
  - Provides a means to address trends without adverse impacts



# Energy Code: Providing alternate ways of compliance for ease & flexibility

- **23.85.N1105.1 Scope (Simulated Performance Alternative).**

Add an exception as follows:

**Exception:** Compliance with section N1105 may be demonstrated through an AHFC approved home energy rating program that meets the following:

- a. A minimum five-star rating is required.
- b. The maximum air infiltration rate shall not exceed four air changes per hour at 50 pascals pressure difference.
- c. The compliance rating shall be performed by a person authorized by AHFC.
- d. Compliance with sections 1105.4 is not required.

# Conclusion

- Questions?