



# National Electrical Code Adoption

City Council Meeting, August 2, 2021



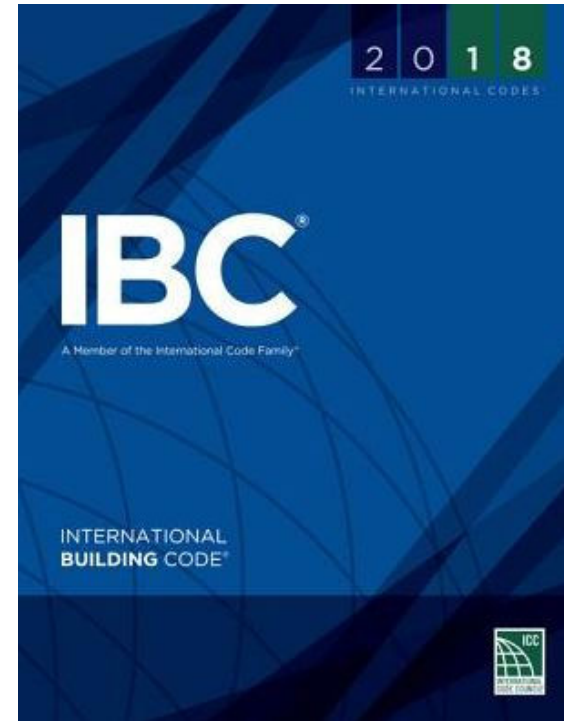
# Currently Adopted Building Code

.....●  
●.....  
Adopted August 20, 2019

# Current Building Codes

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- New Commercial Buildings
- Existing Commercial Buildings
- Residential (all trades)
- Energy Conservation
- Commercial Plumbing
- Commercial Mechanical
- Commercial Fuel Gas
- Commercial Electrical



# Current Building Codes

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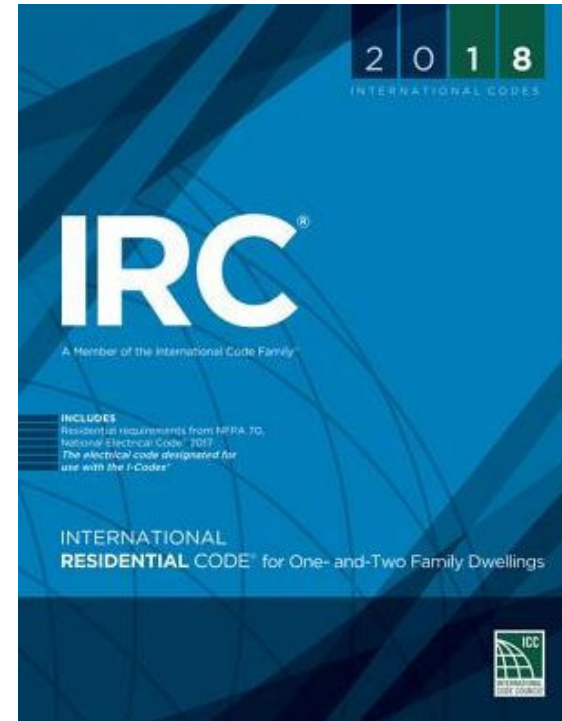
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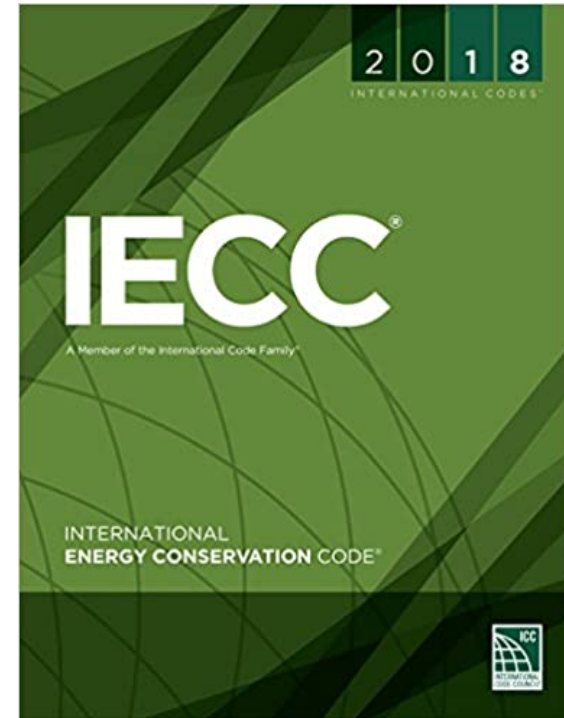
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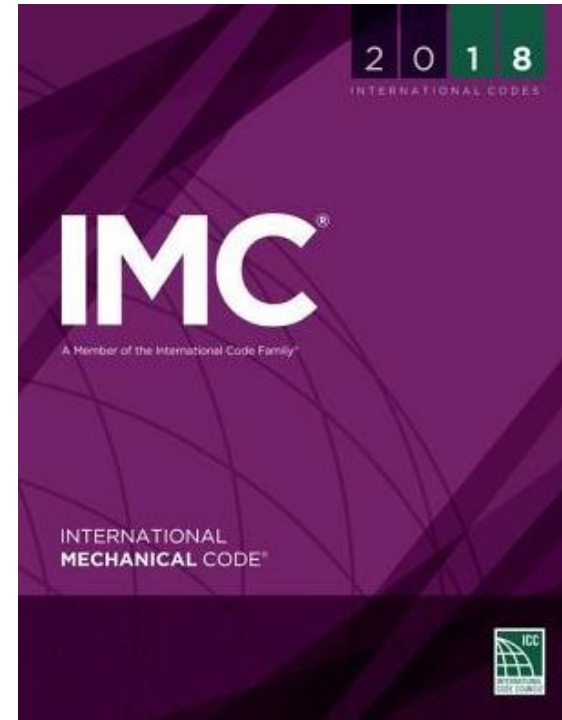
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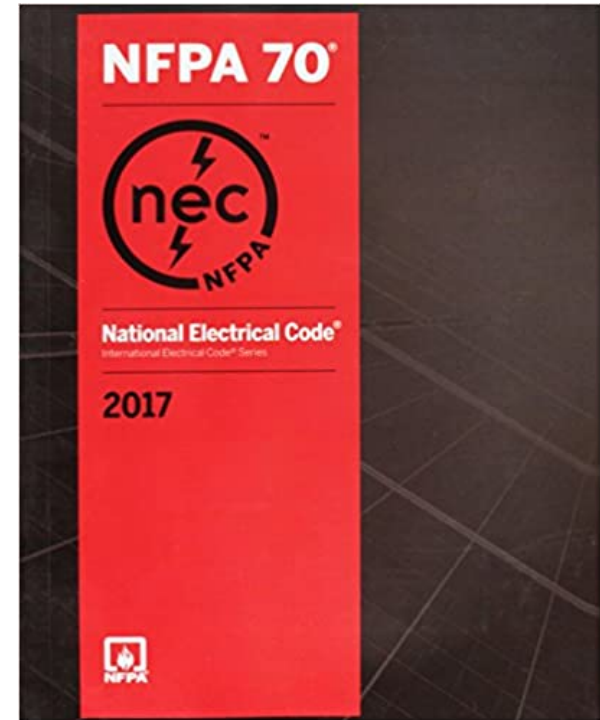
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# Current Building Codes

	Electrical Construction	All Other Construction
<b>Code</b>	National Electrical Code	International Codes
<b>Code Organization</b>	National Fire Protection Agency	International Code Council
<b>3-year Cycle</b>	2014, 2017, 2020...	2015, 2018, 2021...
<b>Adoption Requirements</b>	Mandated by state	Left to municipality



INTERNATIONAL  
CODE  
COUNCIL®



Commerce  
CITY

# Residential Electrical



**2017 NEC residential provisions  
reprinted into 2018 IRC**

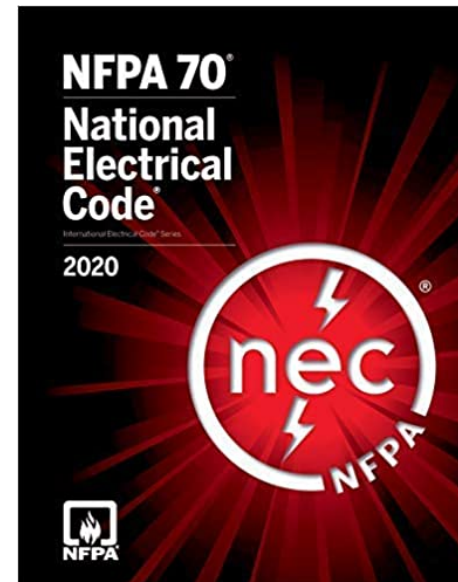


# Proposed Changes

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.....●.....  
Adopted August 20, 2019

# State Mandate

- C.R.S. § 12-115-107
- 2020 NEC adopted by DORA
- Cities must follow state
- August 1, 2020 deadline; state granted COVID extension
- Commercial & residential
- No Colorado-specific amendments
- Cities not permitted to weaken requirements



# Code Update

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- Article IV “International Codes”
- Commercial construction
- Section 5-4500
- Edit to adopted 2020 NEC

## **Sec. 5-4500. – Adoption of National Electrical Code.**

The City of Commerce City adopts the 2020 National Electrical Code (N.F.P.A. 70), including all standards contained therein ("NEC"). Copies of such code are on file in the city clerk's office and may be inspected during regular business hours.

# Code Update

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- Article IV “International Codes”
- Residential construction
- Section 5-4201
- Edit to delete IRC electrical chapters and reference 2020 NEC

(jjjj) Chapters 34 through 43 (Sections E3401 through E4304), are hereby deleted in their entirety and replaced with the following:

(jjjj) *Electrical standards.* Installations of electrical systems, equipment and components for one- and two-family dwellings shall comply with the 2020 National Electrical Code® (NEC®) (NFPA 70®-2020).





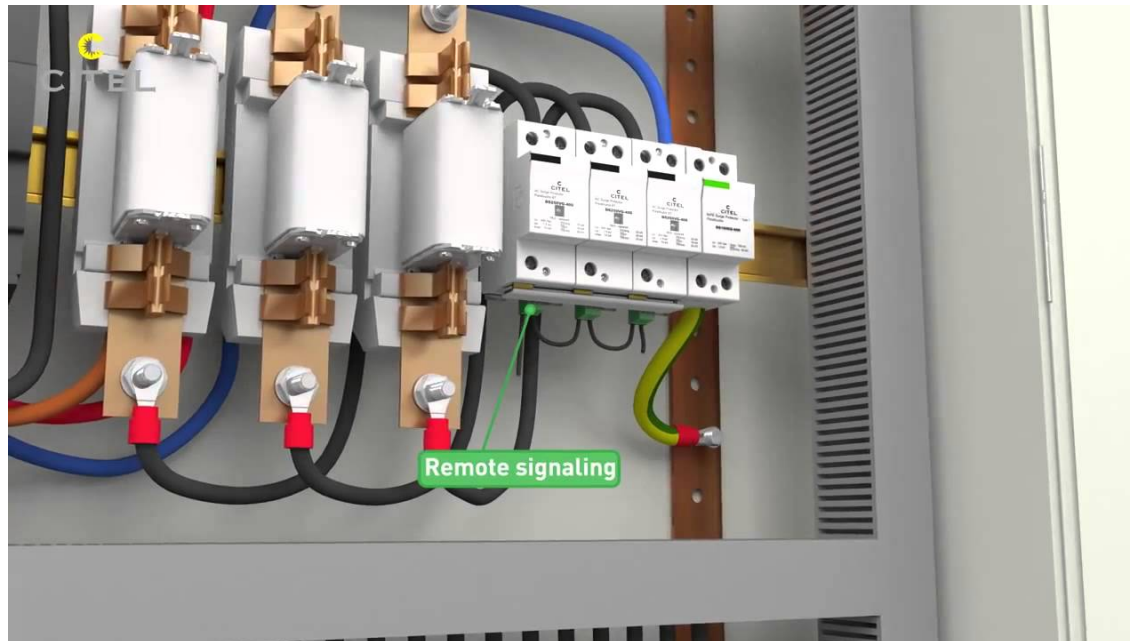
# Major Changes to 2020 NEC

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Adopted August 20, 2019

# Surge Protection Required

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- Dwelling unit-wide
- Protects electrical equipment



# Emergency Disconnect Required

- Exterior to dwelling units
- Operated by first responders
- Protects first responders



# GFCI Locations Expanded

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- Dryers, range receptacles
- New locations in non-dwelling units
- Marinas



# New Tamper Resistant Receptacle Locations

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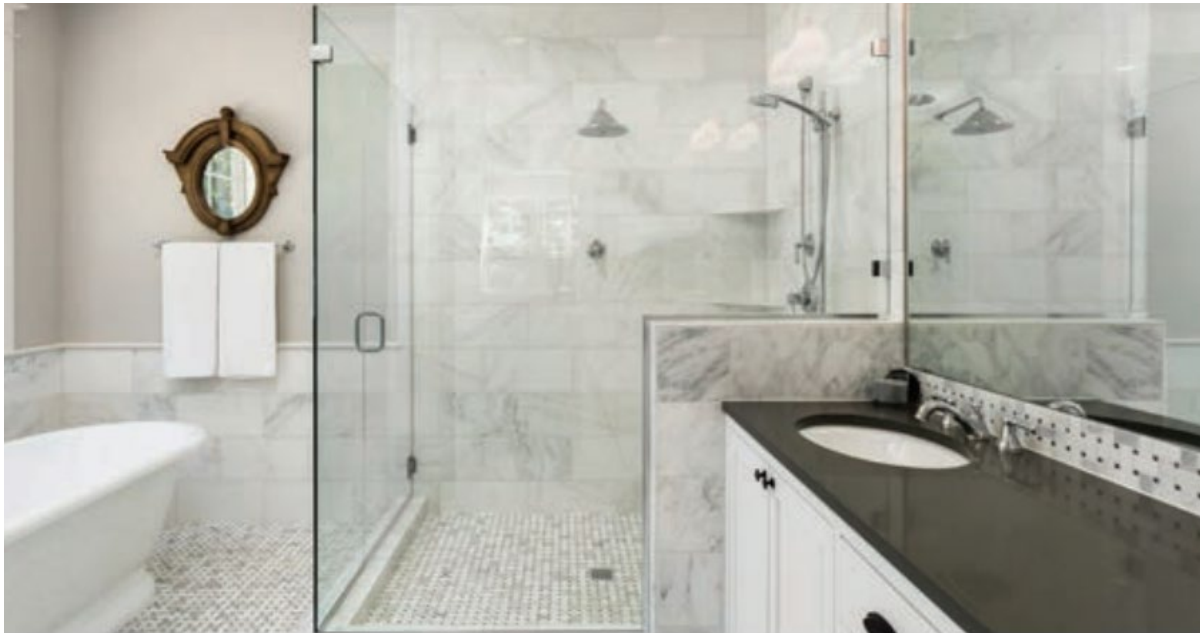
- Hotel common areas
- Dormitories
- Assisted living facilities



# New Prohibited Locations for Receptacles

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- No receptacles permitted 3 feet from tub or shower
- Exceptions added for small bathrooms



# Other Changes

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- Terminal connection torque
- Identification of means of disconnect
- Lighting load for non-dwellings
- Number of service disconnects
- Metal enclosures
- Grounding, bonding of fountains
- Conductors
- Horticulture lighting
- Healthcare facilities
- Ground fault @ marinas
- Overcurrent protection devices
- EV power transfer system
- Motors @ pools
- Fire pump service



# Questions and Discussion

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