



**AGENDA**  
**Regular Meeting of the**  
**Building Code Advisory Board**  
**City Development Conference Room A**  
**March 18, 2025**  
**6:00 p.m.**

- A. CALL TO ORDER
- B. ROLL CALL OF MEMBERS
- C. APPROVAL OF AGENDA
- D. APPROVAL OF MINUTES OF PRECEDING MEETING – April 30, 2024
- E. UNFINISHED BUSINESS - NONE
- F. NEW BUSINESS
  - 1. Public Hearing on Building and Fire Codes Adoption: 2024 version of the IFC, IBC, IRC, IPC, IMC, IFGC, IEBC, IECC, ISPSC, and the 2023 version of the NEC; and Board's recommendation to City Council for such adoption.
- G. OTHER MATTERS
  - 1. Motion to suspend Section 2.2 of the Board's bylaws to allow for the election of officers.
  - 2. Election of officers if motion is adopted.
- H. ADJOURNMENT



## **Building Code Advisory Board Meeting**

**Minutes  
APRIL 30, 2024**

ROLL CALL: Present: Chair Kerry Babin, Vice Chair John Bales, and Members Travis Holland and Michael Anderson. Absent: Member Nelson Wolfmeier.

STAFF MEMBERS PRESENT: Shaun McCullough, Senior Assistant City Attorney, Chad Johnson, Chief Building Official, and Gohlub Vang and Desirae Lovato, Recording Secretaries.

The meeting was called to order at **6:05 p.m.**

### APPROVAL OF AGENDA:

**MOTION WAS MADE BY MICHAEL ANDERSON TO APPROVE THE AGENDA. THE MOTION WAS ADOPTED.**

### APPROVAL OF MINUTES:

**MOTION WAS MADE BY VICE CHAIR BALES TO APPROVE THE APRIL 10, 2024, MINUTES. THE MOTION WAS ADOPTED.**

UNFINISHED BUSINESS: None

NEW BUSINESS: Applicant interviews.

Vice Chair Bales excused himself from the Council Chambers, announcing he needed to abstain from voting, as he was one of the interviewees, and exited the Council Chambers at 6:13 PM.

**The Board interviewed Kaarl Hoopes, Marco Scofido, Chris Blackstock and John Bales.**

**MOTION WAS MADE BY BOARD MEMBER ANDERSON AND WAS SECONDED BY BOARD MEMBER HOLLAND TO APPOINT MARCO SCOFIDO AND TO REAPPOINT VICE CHAIR BALES TO THE BOARD.**

**THE MOTION WAS ADOPTED 3-0, WITH VICE CHAIR BALES ABSTAINING.**

**Vice Chair Bales returned to the Council Chambers at 7:34 pm.**

OTHER MATTERS: None

ADJOURNMENT:

The meeting was adjourned at **7:53 p.m.**

BUILDING CODE ADVISORY BOARD  
CITY OF THORNTON, COLORADO

---



Kerry Babin, Chair

ATTEST:

---

Desirae Lovato, Recording Secretary

**BUILDING CODE ADVISORY BOARD COMMUNICATION**

<b>Meeting Date:</b> March 18, 2025	<b>Agenda Item:</b> Public Hearing	<b>Agenda Location:</b> New Business	<b>Legal Review:</b> 	_____ 1 <sup>st</sup> Reading _____ 2 <sup>nd</sup> Reading
<b>Subject:</b> A public hearing concerning proposed ordinances repealing and reenacting the provisions of Chapter 10, Article IV of the City Code pertaining to adoption by reference of the 2023 Edition of the National Electrical Code and 2024 Edition, with local amendments thereto, of the following codes: International Building Code, International Plumbing Code, International Mechanical Code, International Fuel Gas Code, International Residential Code, International Energy Conservation Code, International Existing Building Code, International Swimming Pool and Spa Code, and the International Fire Code.				
<b>Presenter(s):</b> Chad Johnson, Chief Building Official Justin Nielsen, Plans Examining Supervisor  Stephanie Harpring, Deputy Fire Chief				<b>Ordinance previously introduced by:</b>  _____ <b>N/A</b>

**SYNOPSIS:**

Every three years the City of Thornton has adopted the latest editions of the International Codes (I-Codes) regulating all aspects of building construction as published by the International Code Council (ICC) as a part of the City Code. The 2024 Edition of the International Building and Fire Codes will replace the 2021 Edition currently adopted and is comprised of the International Building, Plumbing, Mechanical, Fuel Gas, Residential, Energy Conservation, Existing Building, Swimming Pool and Spa, and Fire Codes. In addition, the City is required by state law to adopt the most recent version of the National Electrical Code, which is the 2023 edition. In accordance with City Code and State Statute, the codes are adopted by reference and the Building Code Advisory Board (BCAB) will consider the adoptions and amendments at a public hearing held on March 18, 2025, and Council will consider the adoptions and amendments on first reading on April 15, 2025, then set a public hearing for second reading of the ordinance on May 13, 2025. The anticipated effective date of the ordinances will be July 1, 2025. The International Fire Code and the other buildings codes are adopted by separate ordinances.

The proposed ordinances are formatted such that provisions enacted are double underlined for language added and strikeout for deletions in the 2024 International Fire and Building Codes. The proposed adoption of the 2023 National Electrical Code includes no local amendments.

**RECOMMENDATION:**

Staff recommends that BCAB adopt a resolution recommending Alternative No. 1, approval of the ordinances adopting the 2024 Edition of the International Building and Fire Codes, with local amendments, and the 2023 Edition of the National Electric Code. In addition, any modifications to or newer versions of the National Electrical Code (NFPA-70) that are adopted by the Colorado State Electrical Board pursuant to its authority under C.R.S. § 12-23-104(2)(a) shall be automatically incorporated into City Code upon adoption by the State.

**BUDGET/STAFF IMPLICATIONS:**

None.

**ALTERNATIVES:**

1. Recommend approval of the ordinances as presented.
2. Recommend approval of the ordinances as amended by BCAB.
3. Do not recommend approval of the ordinances.

**BACKGROUND (ANALYSIS/NEXT STEPS/HISTORY):** (includes previous City Council action)

In 2000, the ICC produced and published the first full set of the I-Codes. Since then, every three years, a new code is produced and subsequently adopted by Council. Currently, the City has adopted the 2021 Editions of the I-Codes, as amended, and has been enforcing them since June 1, 2023.

The I-Codes are published every three years after extensive code development hearings to stay abreast of the latest in technology, new construction materials, and new construction methods. The I-Codes are developed with participation by building officials, fire officials, engineers, architects, builders, academia, producers, and users. They are model codes for state and local jurisdictions to adopt and may need to be modified, through amendments, to best serve the communities.

Staff has discussed adopting the 2024 editions of the codes as close to the core code as possible. Most of the amendments from the previous codes have been abandoned with only a few amendments carried forward to best serve the business community and residents. Examples of these local amendments include adjustment to the threshold for drinking fountains and the number of required bathrooms for small business spaces. Staff has also included amendments that provide an additional benefit to homeowners. These amendments include egress compliant windows throughout the basement of new construction, no requirement for sprinklers in dwelling units in one- and two-family dwellings and townhomes.

The amendments to the International Residential Code have been sent to the Homebuilders Association (HBA) and there were no objections to the recommended amendments.

Notice of the public hearing on the proposed building and fire code updates was published on March 7, 2025, pursuant to City Code.

Staff will continue to accept plans designed to the 2021 International Codes and 2020 National Electric Code until the effective date. The city will allow those plans to remain valid through the end of construction or expiration of the permit, whichever occurs first.

**ATTACHMENTS:**

- Attachment 1: Public hearing notice and affidavits of posting
- Attachment 2: International building codes and National Electrical Code draft ordinance
- Attachment 3: International Fire Code draft ordinance

## **Notice of Public Hearing**

*March 18, 2025  
6:00 p.m.*

The Building Code Advisory Board of the City of Thornton will conduct an in-person public hearing concerning proposed adoption of the 2024 editions of the International Codes and 2023 National Electric Code on March 18, 2025. At the conclusion of the hearing, the Board will adopt a formal recommendation to City Council as to the adoption of these codes.

Context for the Building and Fire Code Update. The City of Thornton, like other jurisdictions in Colorado, has historically adopted, with local amendments thereto, the latest editions of the International Codes published by the International Code Council every three years. The 2024 Editions will replace the 2021 Editions of the International Building, Residential, Mechanical, Plumbing, Energy Conservation, Swimming Pool and Spa Fire and Fuel Gas Codes, and the 2023 Edition of the National Electrical Code will replace the 2020 version. In accordance with City Code and State Statute, the codes are adopted by reference and, at a future date, Council will consider the amendments on first reading, then set a public hearing for second reading of the ordinance.

The Building Code Advisory Board agenda for this hearing will be posted on the City of Thornton website at [www.ThorntonCO.gov](http://www.ThorntonCO.gov) the Friday prior by 5:00 p.m.

This hearing will be held on March 18, 2025, at 6:00 p.m., in the Thornton City Development Conference Room A., 9500 Civic Center Drive, Thornton, Colorado. To attend, please come to the City Hall entrance by 6:00 p.m. and someone will direct you to the conference room.

A copy of the abovementioned codes and a draft of proposed local amendments are on file with the City Development Department of the City of Thornton for inspection by any interested person.

All interested parties are invited to attend and testify at the public hearing or present their views by providing written comments in advance of the public hearing. Written comments sent via email must be received at [Chad.Johnson@ThorntonCO.gov](mailto:Chad.Johnson@ThorntonCO.gov) prior to 4 p.m. MDT on the day of the public hearing. Written comments sent via mail to Thornton City Hall, City Development Department, 9500 Civic Center Drive, Thornton, CO 80229 must be received prior to 5 p.m. MDT on the Monday preceding the public hearing.

If you have any questions concerning this matter, please email [Chad.Johnson@ThorntonCO.gov](mailto:Chad.Johnson@ThorntonCO.gov) or leave a voicemail for the City Development Department at 303-538-7295.

Qualified individuals with a disability may contact Thornton's ADA Coordinator to request and arrange for accommodations. Requests for accommodation should be made as far in advance as possible, but preferably no less than five business days prior to the date needed. Please contact Thornton's ADA Coordinator via telephone 303-538-7334 or email [adacoordinator@ThorntonCO.gov](mailto:adacoordinator@ThorntonCO.gov).

BUILDING CODE ADVISORY BOARD OF THE  
CITY OF THORNTON, COLORADO  
Kerry Babin, Chairperson

ATTEST: Desirae Lovato, Recording Secretary

Approved as to Form: Shaun McCullough, Senior Assistant City Attorney

Published: March 7, 2025

AFFIDAVIT OF POSTING

PUBLIC NOTICE

State of Colorado     )  
                                  ) ss.  
County of Adams     )

I, Stacie Flis, being first duly sworn upon oath depose and say that I did, on March 7, 2025, post the PUBLIC NOTICE of the Building Code Advisory Board in City of Thornton, Colorado, for the Public Hearing concerning proposed adoption of the 2024 editions of the International Codes and 2023 National Electric Code on March 18, 2025. At the conclusion of the hearing, the Board will adopt a formal recommendation to City Council as to the adoption of these codes. This Hearing will be held on March 18, 2025, at 6 p.m. at Thornton City Development Conference Room A, 9500 Civic Center Drive, Thornton, Colorado.

A copy of which posted Notice is attached hereto and posted at the following locations:

1. Thornton City Hall, 9500 Civic Center Dr.
2. Margaret W. Carpenter Recreation Center, 11151 Colorado Blvd.
3. Thornton Active Adult Center, 11181 Colorado Blvd.
4. Trail Winds Recreation Center, 13495 Holly St.

Signed: Stacie Flis  
Administrative Specialist

Date: 03/10/2025

Subscribed and sworn to before me by Stacie Flis, in the County of Adams, State of Colorado, this 10 day of March, 2025

Notary Public

My Commission Expires

[Signature]

2/24/2026

AFFIDAVIT OF POSTING

LEGAL NOTICE OF PUBLIC HEARING

State of Colorado       )  
                                  ) ss.  
County of Adams       )

I, **Monica Gutierrez**, being first duly sworn upon oath depose and say that I did, on March 6, 2025, post the Public Notice of the Building Code Advisory Board for the City of Thornton, Colorado for the public hearing concerning the proposed adoption of the 2024 editions of the International Codes and 2023 National Electric Code on March 18, 2025. At the conclusion of the hearing, the Board will adopt a formal recommendation to City Council as to the adoption of these codes.

Context for the Building and Fire Code Update. The City of Thornton, like other jurisdictions in Colorado, has historically adopted, with local amendments thereto, the latest editions of the International Codes published by the International Code Council every three years. The 2024 Editions will replace the 2021 Editions of the International Building, Residential, Mechanical, Plumbing, Energy Conservation, Swimming Pool and Spa Fire and Fuel Gas Codes, and the 2023 Edition of the National Electrical Code will replace the 2020 version. In accordance with City Code and State Statute, the codes are adopted by reference and, at a future date, Council will consider the amendments on first reading, then set a public hearing for second reading of the ordinance.

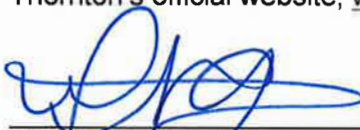
The Building Code Advisory Board agenda for this hearing will be posted on the City of Thornton website at [www.ThorntonCO.gov](http://www.ThorntonCO.gov) the Friday prior by 5:00 p.m.

This hearing will be held on March 18, 2025, at 6:00 p.m., in the Thornton City Development Conference Room A., 9500 Civic Center Drive, Thornton, Colorado.

The legal notice was posted at the following location, pursuant to City Code Section 2-1:

1. Thornton's official website, [www.thorntonCO.gov](http://www.thorntonCO.gov).

Signed:

  
\_\_\_\_\_  
Title: Administrative Specialist II

Date:

3/6/25

Subscribed and sworn to before me by Monica Gutierrez. In the County of Adams, State of Colorado, This 18<sup>th</sup> day of March, 2025.

Notary Public

  
\_\_\_\_\_





INTRODUCED BY: \_\_\_\_\_

AN ORDINANCE AMENDING THORNTON CITY CODE SECTION 2-55 PERTAINING TO ADOPTION OF CODES BY REFERENCE, AND SECTION 10-34 TO CLARIFY THAT CITY EMPLOYEES MAY NOT SERVE ON THE BUILDING CODE ADVISORY BOARD, AND REPEALING AND REENACTING VARIOUS SECTIONS IN ARTICLE IV TO ADOPT BY REFERENCE, WITH LOCAL AMENDMENTS THERETO, THE 2024 EDITIONS OF THE INTERNATIONAL BUILDING CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL RESIDENTIAL CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL EXISTING BUILDING CODE AND INTERNATIONAL SWIMMING POOL AND SPA CODE, AND THE 2023 EDITION OF THE NATIONAL ELECTRICAL CODE.

WHEREAS, the City previously adopted the 2021 editions of the above-referenced international codes and the 2017 edition of the National Electrical Code; and

WHEREAS, the 2024 editions of the above-referenced international codes and the 2023 National Electrical Code represent national building and construction standards that are updated and amended from time to time to conform to the changing need of the construction industry; and

WHEREAS, it is deemed to be in the best interest of the City's residents and will serve to promote public health, safety, and general welfare to adopt by reference the updated versions of said codes with local amendments thereto.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF THORNTON, COLORADO, AS FOLLOWS:

1. Sections 2-55(a) and (b)(5) 10-61 and 10-34(b) of the Thornton City Code are hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows.

**Sec. 2-55. - Adoption of codes by reference.**

*Definitions.* The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

*Code* means any published compilation of statutes, ordinances, rules, regulations, or standards adopted by the federal government or the state, or by an agency of either of them, or by any municipality within the state or by any state or nationally recognized organization, institution or agency, such as but not limited to the International Code Council Pacific Coast Building Officials Conference and the National Fire Protection Association. The city council may adopt a recodification of the city's own ordinances by ordinance, which ordinance shall be published pursuant to Section 2-1 and which ordinance need not follow the publication and hearing

requirements for codes adopted by reference in the codification or recite all penalties found in the recodification.

*Primary code* means any code which is directly adopted by reference in whole or in part by any ordinance passed pursuant to the Charter.

*Secondary code* means any code which is incorporated by reference, directly or indirectly, in whole or in part, in any primary code or in any secondary code.

If, at any time, any code which the city has previously adopted by reference shall be amended by the agency or municipality which originally promulgated, adopted or enacted it, the council may adopt such amendment by reference through the same procedure as required for the adoption of the original code, or an ordinance may be enacted in regular manner setting forth the entire text of such amendment, unless another procedure is specified within the ordinance.

**Section 10-151** of the Thornton City Code is hereby repealed and reenacted to read as follows:

#### **Article IV. Technical Standards**

##### **Sec. 10-151. International Building Code adopted by reference.**

The International Building Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001. The purpose and subject matter of the International Building Code includes regulating construction aspects of building and providing greater safety to the public and uniformity in building laws. The International Building Code, 2024 edition, is hereby adopted by this reference and incorporated into this Code as the Building Construction Code of the City. Except as otherwise provided in Section 10-152, the International Building Code, 2024 edition, is adopted in full including the outline of contents and the index, but excluding all appendix chapters, except Appendix I.

**Section 10-152** of the Thornton City Code is hereby repealed and reenacted to read as follows:

##### **Sec. 10-152. Amendments to International Building Code.**

The International Building Code adopted in Section 10-151 is hereby amended as follows, with section numbers referring to section numbers of the International Building Code:

**Subsection 101.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### 101.1 Title.

These regulations shall be known as the *Building Code* of ~~[NAME OF JURISDICTION]~~ the City of Thornton, hereinafter referred to as “this code.”

**Subsection 101.4.4** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### 101.4.4 Property maintenance.

The provisions of the *International Existing Building Code and the Uniform Code for the Abatement of Dangerous Buildings* ~~*International Property Maintenance Code*~~ shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

**Subsection 102.6** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### 102.6 Existing structures.

The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *Uniform Code for the Abatement of Dangerous Buildings*, the *International Existing Building Code*, ~~*the International Property Maintenance Code*~~, or the *International Fire Code*.

**Subsections 114.1 and 114.2** are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### [A] 114.1 Unlawful acts.

It shall be unlawful for any *person*, firm or corporation to erect, construct, alter, extend, *repair*, move, remove, demolish or occupy any *building, structure* or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code. Additionally, any property owner may be held liable for any of the above referenced actions taken by any person in violation of any of the provisions of this code on the property owner's property.

### [A] 114.2 Notice of violation.

The *building official* is authorized to serve a notice of violation or order on any person or property owner who violates Subsection 114.1 ~~the person responsible for the erection, construction, *alteration*, extension, *repair*, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code.~~ Such order

shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

**Section 202 Definitions;** [BS] DANGEROUS is hereby amended by addition of the words double-underlined to read as follows:

**[BS] DANGEROUS.**

Any building, structure or portion thereof that meets any of the conditions described below or meets the definition of dangerous as stated in the Uniform Code for the Abatement of Dangerous Buildings shall be deemed *dangerous*:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under permanent, routine, or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake, or other environmental loads when such loads are imminent.

**Section 202 Definitions** is hereby amended by the addition of the words double-underlined to read as follows:

**SLEEPING ROOM.** A habitable space that meets the minimum area requirements of the building code, and, contains a closet or an area that is readily convertible to a closet. An adjacent area fitted with permanently affixed floor to ceiling shelving and no clothes rod may be defined as a storage room in a non-sleeping room.

**Subsection 915.2.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**915.2.1 Dwelling units.**

Carbon monoxide detection shall be installed in dwelling units outside of each separate sleeping area within fifteen feet (4572 mm) of the entrance to each ~~in the immediate vicinity of the~~ bedrooms. Where a CO source is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom.

A new *Subsection 915.1.2.* is hereby enacted to read as follows:

**915.1.2 Where required in existing dwellings.**

Where interior work requiring a permit occurs in existing Group I or R occupancies that have attached garages or contain fuel-fired appliances, carbon monoxide alarms shall be provided in locations described in Section 915.2.1 through 915.2.2. A listed smoke/carbon monoxide detector may be used if the signals clearly differentiate between the two hazards. Carbon monoxide detectors may be hard wired, plugged into an unswitched

outlet or battery powered and attached to the wall or ceiling. Carbon monoxide detectors are not required to be interconnected.

**Subsection 1031.2** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**1031.2 Where required.**

In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.4(1) and 1006.3.4(2).
2. Group R-3 and R-4 occupancies.

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

**Exceptions:**

- ~~1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.~~
21. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens to a public way.
32. Basements without habitable spaces and having no more than 200 square feet (18.6 m<sup>2</sup>) in floor area shall not be required to have emergency escape and rescue openings.
43. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.
- ~~5. Within individual dwelling and sleeping units in Groups R-2 and R-3 where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:~~

~~4.1. One means of egress and one emergency escape and rescue opening.~~

~~4.2. Two means of egress.~~

**Subsection 1031.3.1** is hereby amended by the deletion of the words stricken to read as follows:

**1031.3.1 Minimum size.**

*Emergency escape and rescue openings* shall have a minimum net clear opening of 5.7 square feet (0.53 m<sup>2</sup>).

~~Exception: The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.46 m<sup>2</sup>).~~

**Subsection 1031.6** is hereby amended by the addition of the words double-underlined to read as follows:

**1031.6 Bars, grilles, covers and screens.**

Where bars, grilles, covers, screens or similar devices are placed over emergency escape and rescue openings or area wells that serve such openings, the minimum net clear opening size shall comply with Sections 1031.3 and 1031.5. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the *emergency escape and rescue opening*. Such bars, grilles, or grates shall weigh no more than 30 pounds (13.6 kg). Where such bars, grilles, grates or similar devices are installed in existing buildings, smoke alarms shall be installed in accordance with Section 907.2.11 regardless of the valuation of the alteration.

**Subsection 1209.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**1209.1 Crawl spaces.**

Crawl spaces shall be provided with not less than one access opening that shall be not less than ~~4822~~ inches by ~~2430~~ inches (~~457 mm by 610 mm~~)(559mm by 762mm).

A new **Subsection 1512.1.2** is hereby enacted to read as follows:

**1512.1.2 Replacement of asphalt shingles.**

When more than one square of asphalt shingles is required to be replaced over the aggregate area of the roof and a permit is required, every slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley. All existing layers of asphalt shingles shall be removed to the roof deck.

**Subsection 1612.3** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**1612.3 Establishment of flood hazard areas.**

To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in a report entitled "The Flood Insurance Study for ~~[INSERT NAME OF JURISDICTION]~~ the City of Thornton dated [INSERT DATE OF ISSUANCE] December 2, 2021 as amended or revised with the accompanying Flood Insurance Rate Map FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

**Subsection 1805.4.3** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**1805.4.3 Drainage discharge.**

The floor base and foundation perimeter drain shall be designed to collect in a sump and discharge by gravity ~~or and~~ mechanical means into an *approved* drainage system that complies with the *International Plumbing Code*.

**Exception:** ~~Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required.~~

**Table 2902.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**[P]TABLE 2902.1  
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES<sup>a</sup>(See Sections 2902.1.1 and 2902.2)**

No.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS SEE <u>SECTION 424.2</u> OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE <u>SECTION 410</u> OF THE INTERNATIONAL PLUMBING CODE) <sup>a</sup>	OTHER
			Male	Female	Male	Female			
1	Assembly	Theaters and other buildings for the performing arts and motion pictures <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Nightclubs, bars, taverns, dance halls and buildings for similar purposes <sup>d</sup>	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink

		Restaurants, banquet halls and food courts <sup>d</sup>	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink
		Casino gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		—	1 per 1,000	1 service sink
		Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Passenger terminals and transportation facilities <sup>d</sup>	1 per 500	1 per 500	1 per 750		—	1 per 1,000	1 service sink
		Places of worship and other religious services <sup>d</sup>	1 per 150	1 per 75	1 per 200		—	1 per 1,000	1 service sink
		Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
		Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities <sup>f</sup>	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
2	Business	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial, ambulatory care and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink <sup>e</sup>



3	Educational	Educational facilities	1 per 50	1 per 50	—	1 per 100	1 service sink
4	Factory and industrial	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100	1 per 100	—	1 per 400	1 service sink
5	Institutional	Custodial care facilities	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Medical care recipients in hospitals and nursing homes <sup>b</sup>	1 per room <sup>c</sup>	1 per room <sup>c</sup>	1 per 15	1 per 100	1 service sink
		Employees in hospitals and nursing homes <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
		Visitors in hospitals and nursing homes	1 per 75	1 per 100	—	1 per 500	—
		Prisons <sup>b</sup>	1 per cell	1 per cell	1 per 15	1 per 100	1 service sink
		Reformatories, detention centers and correctional centers <sup>b</sup>	1 per 15	1 per 15	1 per 15	1 per 100	1 service sink
		Employees in reformatories, detention centers and correctional centers <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
		Adult day care and child day care	1 per 15	1 per 15	1	1 per 100	1 service sink
6	Mercantile	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500	1 per 750	—	1 per 1,000	1 service sink <sup>e</sup>
7	Residential	Hotels, motels, boarding houses (transient)	1 per sleeping unit	1 per sleeping unit	1 per sleeping unit	—	1 service sink

		Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Apartment house	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units
		One- and two-family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit	1 per 10	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		Congregate living facilities with 16 or fewer persons	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
8	Storage	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100	1 per 100	—	1 per 1,000	1 service sink

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted, provided that each patient sleeping unit has direct access to the toilet room and provisions for privacy for the toilet room user are provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

- e. For business and mercantile classifications with an occupant load of 4525 or fewer, and mercantile classifications with an occupant load of 42 or fewer, a service sink shall not be required.
- f. The required number and type of plumbing fixtures for outdoor swimming pools shall be in accordance with Section 609 of the *International Swimming Pool and Spa Code*.
- g. Drinking fountains are not required where only one toilet room is required.

**Section 10-153** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-153. International Plumbing Code adopted by reference.**

The International Plumbing Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001. The purpose and subject matter of the International Plumbing Code includes regulating the construction, alteration, and repair of all new and existing structures and specifically all plumbing installations therein or in connection therewith. The International Plumbing Code, 2024 edition, is hereby adopted by this reference and incorporated into this Code as the Plumbing Code of the City. Except as otherwise provided in Section 10-154, the International Plumbing Code, 2024 edition, is adopted in full including the outline of contents and the index, but excluding all appendix chapters, except Appendix E.

Section 10-154 of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-154. Amendments to International Plumbing Code.**

The International Plumbing Code adopted in Section 10-153 is amended as follows, with section numbers referring to section numbers of the International Plumbing Code:

**Subsection [A] 101.1** is hereby amended by the deletion of the words stricken and addition of the words double underlined to read as follows:

**[A] 101.1 Title.**

These regulations shall be known as the *Plumbing Code* of the City of Thornton~~[NAME OF JURISDICTION]~~, hereinafter referred to as "this code."

**Subsection 305.4** is hereby amended by the addition of the words double-underlined to read as follows:

**305.4 Freezing.**

Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures

unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping between the tap of the main water line and the water meter shall be installed not less than 48 inches (1219 mm) below finished grade. The water service piping serving the building from the meter shall be installed not less than 6 inches (152 mm) below the frost line and not less than 12 inches (305 mm) below grade.

**Subsection 305.4.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

#### 305.4.1 Sewer depth.

Building sewers that connect to private sewage disposal systems shall be installed not less than ~~[NUMBER]~~ 12 inches (305 mm) below finished grade at the point of septic tank connection. Building sewers shall be installed not less than ~~[NUMBER]~~ 12 inches (305 mm) below grade.

**Subsection 312.1** is hereby amended by the deletion of the words stricken to read as follows:

#### 312.1 Required tests.

The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and he or she shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. Plumbing system piping shall be tested with either water or, ~~for piping systems other than plastic, by air.~~ After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

**Table 403.1 footnotes e and g** are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

TABLE 403.1  
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES<sup>a</sup>(See Sections 403.1.1 and 403.2)

No.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS SEE <u>SECTION 424.2 OF THE INTERNATIONAL PLUMBING CODE</u> )		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE <u>SECTION 410 OF THE INTERNATIONAL PLUMBING CODE</u> ) <sup>a</sup>	OTHER
			Male	Female	Male	Female			
1	Assembly	Theaters and other buildings for the performing arts and motion pictures <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Nightclubs, bars, taverns, dance halls and buildings for similar purposes <sup>d</sup>	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink
		Restaurants, banquet halls and food courts <sup>d</sup>	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink

		Casino gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		—	1 per 1,000	1 service sink
		Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Passenger terminals and transportation facilities <sup>d</sup>	1 per 500	1 per 500	1 per 750		—	1 per 1,000	1 service sink
		Places of worship and other religious services <sup>d</sup>	1 per 150	1 per 75	1 per 200		—	1 per 1,000	1 service sink
		Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
		Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities <sup>f</sup>	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
2	Business	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial, ambulatory care and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink <sup>e</sup>
3	Educational	Educational facilities	1 per 50		1 per 50		—	1 per 100	1 service sink
4	Factory and industrial	Structures in which occupants are engaged in work fabricating,	1 per 100		1 per 100		—	1 per 400	1 service sink

		assembly or processing of products or materials					
5	Institutional	Custodial care facilities	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Medical care recipients in hospitals and nursing homes <sup>b</sup>	1 per room <sup>c</sup>	1 per room <sup>c</sup>	1 per 15	1 per 100	1 service sink
		Employees in hospitals and nursing homes <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
		Visitors in hospitals and nursing homes	1 per 75	1 per 100	—	1 per 500	—
		Prisons <sup>b</sup>	1 per cell	1 per cell	1 per 15	1 per 100	1 service sink
		Reformatories, detention centers and correctional centers <sup>b</sup>	1 per 15	1 per 15	1 per 15	1 per 100	1 service sink
		Employees in reformatories, detention centers and correctional centers <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
		Adult day care and child day care	1 per 15	1 per 15	1	1 per 100	1 service sink
6	Mercantile	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500	1 per 750	—	1 per 1,000	1 service sink <sup>e</sup>
7	Residential	Hotels, motels, boarding houses (transient)	1 per sleeping unit	1 per sleeping unit	1 per sleeping unit	—	1 service sink
		Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Apartment house	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units

		One- and two-family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit	1 per 10	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		Congregate living facilities with 16 or fewer persons	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
8	Storage	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100	1 per 100	—	1 per 1,000	1 service sink

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted, provided that each patient sleeping unit has direct access to the toilet room and provisions for privacy for the toilet room user are provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business ~~and mercantile~~ classifications with an occupant load of ~~1525~~ or fewer, and mercantile classifications with an occupant load of 42 or fewer, a service sink shall not be required.
- f. The required number and type of plumbing fixtures for outdoor swimming pools shall be in accordance with Section 609 of the *International Swimming Pool and Spa Code*.

g. Drinking fountains are not required where only one toilet room is required.

**Subsection 410.2** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**410.2 Small occupancies.**

Drinking fountains shall not be required where only one toilet room is required for an occupant load of 15 or fewer.

**Subsection 410.4** is hereby amended by the addition of the words double-underlined to read as follows:

**410.4 Substitution.**

Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other occupancies, where three or more drinking fountains are required, water dispensers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

**Exception:** Where only one drinking fountain is required by Table 403.1 a water cooler or bottled water dispenser may be substituted.

**Subsection 604.8** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**604.8 Water-pressure reducing valve or regulator.**

The maximum static pressure within a building shall be 80 psi (552 kPa). ~~Where water pressure within a building exceeds 80 psi (552kPa) static, a~~ An approved water-pressure reducing valve conforming to ASSE 1003 or CSA B356 with strainer shall be installed to reduce the pressure in the building water distribution piping to not greater than 80 psi (552 kPa) static.

**Section 10-155** of the Code is hereby repealed and reenacted to read as follows:

**Sec. 10-155. International Mechanical Code adopted by reference.**

The International Mechanical Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001, is hereby adopted by this reference and incorporated in this Code as the Mechanical Code of the City. The purpose and subject matter of the International Mechanical Code includes the regulation of the construction, alteration, and repair of all new and existing structures and specifically all mechanical installations therein or in connection therewith. Except as otherwise provided in this Code, the International Mechanical Code, 2024 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

**Section 10-156** of the Thornton City Code is hereby repealed and to read as follows:

**Sec. 10-156. Amendments to the International Mechanical Code.**



The International Mechanical Code adopted in Section 10-155 is amended as follows, with section numbers referring to section numbers of the International Mechanical Code:

**Subsection [A] 101.1** is hereby amended by the deletion of the words stricken and addition of the words double underlined to read as follows:

**[A] 101.1 Title.**

These regulations shall be known as the *Mechanical Code* of ~~[NAME OF JURISDICTION]~~, the City of Thornton, hereinafter referred to as “this code.”

**Section 10-157** of the Code is hereby repealed and reenacted to read as follows:

**Sec. 10-157. International Fuel Gas Code adopted by reference.**

The International Fuel Gas Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001, is hereby adopted by this reference and incorporated in this Code as the Fuel Gas Code of the City. The purpose and subject matter of the International Fuel Gas Code includes the design and installation of fuel gas systems and gas-fired appliances. Except as otherwise provided in this Code, the International Fuel Gas Code, 2024 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

**Section 10-158** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-158. Amendments to the International Fuel Gas Code.**

The International Fuel Gas Code adopted in Section 10-157 is amended as follows, with section numbers referring to section numbers of the International Fuel Gas Code:

**Subsection [A] 101.1** is hereby amended by the deletion of the words stricken and addition of the words double-underlined to read as follows:

**[A] 101.1 Title.**

These regulations shall be known as the *Fuel Gas Code* of ~~[NAME OF JURISDICTION]~~, the City of Thornton, hereinafter referred to as “this code.”

**Subsection 406.4.1** is hereby repealed and reenacted to read as follows:

**406.4.1 Test pressure.**

The minimum test pressure for a low-pressure gas system shall be 20 pounds per square inch (137.9 kPa) for 15 minutes. Low-pressure gas shall be defined as 14 inches

of water column or less. The minimum test pressure for any other gas system shall be 60 pounds per square inch (413.7 kPa) for 30 minutes.

**Subsection 406.4.2** is hereby repealed in its entirety.

Section 10-162 of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-162. National Electrical Code adopted by reference.**

The National Electrical Code, as currently adopted by the State of Colorado, or as is amended in the future and adopted by the State of Colorado, is adopted in full by reference thereto and incorporated into this Code as the Electrical Code of the city. The city's adoption shall occur simultaneously with any adoption by the State of Colorado and the terms of Section 2-55 shall not apply to this section. The purpose and subject matter of the National Electrical Code includes minimum regulations for the practical safeguarding of persons and property from the hazards arising from the use of electricity.

**Section 10-164** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-164. International Residential Code adopted by reference.**

The International Residential Code, 2024 edition, published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001., is hereby adopted by this reference and incorporated in this Code as the Residential Code of the City. The purpose and subject matter of the International Residential Code includes the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of one and two-family dwellings and townhouses not more than three stories in height, and providing for the issuance of permits and collection of fees therefore. Except as otherwise provided in this Code, the International Residential Code, 2024 edition, is adopted in full including the outline of contents and the index, but excluding all appendix chapters, except Appendix BF and Appendix BG.

2. Section 10-165 of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-165. Amendments to the International Residential Code.**

The International Residential Code adopted in Section 10-164 is amended as follows, with section numbers referring to section numbers of the International Residential Code:

**Subsection R101.1** is hereby amended by the deletion of the words stricken and addition of the words double-underlined to read as follows:

### **R101.1 Title.**

These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of ~~[NAME OF JURISDICTION]~~the City of Thornton, and shall be cited as such and will be referred to herein as “this code.”

**Subsection R102.7** is hereby amended by the deletion of the words stricken and addition of the words double-underlined to read as follows:

### **R102.7 Existing structures.**

The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Existing Building Code*~~*International Property Maintenance Code*~~ or the *International Fire Code*, or as is deemed necessary by the *building official* for the general safety and welfare of the occupants and the public.

**Subsection R202** is hereby amended by the addition of the words double-underlined to read as follows:

### **SLEEPING ROOM.**

A habitable space that meets the minimum area requirements of the building code, and, contains a closet or an area that is readily convertible to a closet. An adjacent area fitted with permanently affixed floor to ceiling shelving and no clothes rod may be defined as a storage room in a non-sleeping room.

**Subsection R202** is hereby amended by the addition of the words double-underlined to read as follows:

### **DWELLING UNIT.**

A single unit providing complete independent living facilities, for one or more *persons*, including permanent provisions for living, sleeping, eating, cooking and sanitation. Independent, in this circumstance, means having a separate designated entrance and address. For the definition applicable in Chapter 11, see Section N1101.6. For the definition applicable in Chapter 24, see section G2403.

**Table R301.2** is hereby repealed and reenacted to read as follows:

### **Table R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD <sup>o</sup>	WIND DESIGN				SEISMIC DESIGN	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLA YMENT REQUIRE D <sup>h</sup>	FLOOD HAZARDS <sup>g</sup>	AIR FREEZING INDEX <sup>x</sup>	MEAN ANNUAL TEMP <sup>j</sup>
	Speed <sup>d</sup> (mph)	Topograp hic effects <sup>k</sup>	Special wind region <sup>l</sup>	Windborn e debris zone <sup>m</sup>	CATEGOR Y <sup>f</sup>	Weatheri ng <sup>a</sup>	Frost line depth <sup>b</sup>	Termite <sup>c</sup>				
30 psf	105 ult	NO	NO	NO	B	Severe	36"	sli to mod	NO	IBC 1612.3	1500	45°F
MANUAL J DESIGN CRITERIA <sup>n</sup>												
Elevation			Altitude correctio n factor <sup>e</sup>	Coincide nt wet bulb	Indoor winter design relative humidity	Indoor winter design dry-bulb temperature			Outdoor winter design dry-bulb temperature		Heating temperature difference	
5,344 ft			0.84	59° F	50%	70° F			1° F		69° F	
Latitude			Daily range	Summer design gains	Indoor summer design relative humidity	Indoor summer design dry-bulb temperature			Outdoor summer design dry-bulb temperature		Cooling temperature difference	
40° N			High(H)	—	50%	75° F			91° F		16° F	

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, “negligible,” “moderate” or “severe” for concrete as determined from Figure R301.2(1). The grade of masonry units shall be determined from ASTM C34, ASTM C55, ASTM C62, ASTM C73, ASTM C90, ASTM C129, ASTM C145, ASTM C216 or ASTM C652.
- b. Where the frost line depth requires deeper footings than indicated in Figure R403.1(1), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the ultimate design wind speeds map [Figure R301.2(2)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The jurisdiction shall fill in this section of the table to establish the design criteria using Table 10A from ACCA Manual J or established criteria determined by the jurisdiction.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

- g. The jurisdiction shall fill in this part of the table with: the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas); and the title and date of the currently effective Flood Insurance Study or other flood hazard study and maps adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- l. In accordance with Figure R301.2(2), where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.
- o. The jurisdiction shall fill in this section of the allowable stress design table using the Ground Snow Loads in Figure R301.2(3). For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

**Subsections R302.3** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### **R302.3 Two-family dwellings.**

Dwelling units in two-family dwellings shall be separated from each other in accordance with sections 302.3.1 through 302.3.5, ~~regardless of whether a lot line exists between the two dwelling units or not.~~ Dwelling units in two-family dwellings divided by a legal property line shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.2 for Townhouses.

**Subsection R302.13** is hereby repealed in its entirety.

**Subsection R309.1** is hereby repealed in its entirety.

**Subsection R309.2** is hereby repealed in its entirety.

**Subsection R310.6** is hereby amended by the addition of the words double-underlined to read as follows:

#### **R310.6 Power source.**

Smoke alarms shall receive their primary power from the *building* wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a 10-year battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

#### **Exceptions:**

1. Smoke alarms shall be permitted to be battery operated where installed in *buildings* without commercial power.
2. Smoke alarms installed in accordance with Section R314.2.2 shall be permitted to be battery powered.

**Subsection R310.7.4** is hereby amended by the addition of the words double-underlined to read as follows:

#### **R310.7.4 Combination detectors.**

Combination smoke and *carbon monoxide detectors* shall be permitted to be installed in fire alarm systems in lieu of smoke detectors, provided that they are *listed* in accordance with UL 268 and UL 2075. Battery power alarms shall be rated for the life of the device

**Subsection R311.3** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### **R311.3 Location.**

Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area ~~in the immediate vicinity~~ within 15 feet (4572 mm) of ~~the~~ each bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

**Subsection R319.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### **R319.1 Emergency escape and rescue opening required.**

Basements, habitable attics, the room to which a sleeping loft is open, and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue openings shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a *yard* or court having a minimum width of 36 inches (914 mm) that opens to a public way.

#### **Exceptions:**

1. Basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m<sup>2</sup>).
2. Storm shelters constructed in accordance with ICC 50.
- ~~3. Where the dwelling unit or townhouse unit is equipped with an automatic sprinkler system installed in accordance with Section P2904, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:  
3.1 One means of egress complying with Section R311 and one emergency escape and rescue opening.  
3.2 Two means of egress complying with Section R311.~~
43. A yard shall not be required to open directly into a public way where the yard opens to an unobstructed path from the yard to the public way. Such path shall have a width of not less than 36 inches (914 mm).

**Subsection R319.2** is hereby amended by the addition of the words double-underlined to read as follows:

## **R319.2 Emergency escape and rescue openings.**

Emergency Escape and rescue openings and all below grade windows in unfinished basements shall have minimum dimensions in accordance with Sections R319.2.1 through R319.2.4

**Subsection R319.2.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### **R319.2.1 Minimum size.**

Emergency escape and rescue openings shall have a net clear opening of not less than 5.7 square feet (0.530 m<sup>2</sup>).

~~**Exception:** The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.465 m<sup>2</sup>).~~

**Subsection R319.4** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

### **R319.4 Area wells.**

~~An~~ Emergency escape and rescue openings and all below grade windows in unfinished basements where the bottom of the clear opening is below the adjacent grade shall be provided with an area well in accordance with Sections R310.4.1 through R310.4.4.

**Subsection R319.4.4** is hereby amended by the addition of the words double-underlined to read as follows:

#### **R319.4.4 Bars, grilles, covers and screens.**

Where bars, grilles, covers, screens or similar devices are placed over emergency escape and rescue openings, bulkhead enclosures or area wells that serve such openings, the minimum net clear opening size shall comply with Sections R319.2.1 through R319.2.2 and R319.4.1. Such devices shall be releasable or removable from the inside without the use of a key or tool or force greater than that which is required for normal operation of the escape and rescue opening. Such devices shall weigh no more than 30 lbs (13.6 kg).

A new **Section R332** is hereby enacted by the addition of the words double-underlined to read as follows:

## **SECTION R332 MANUFACTURED HOMES**



### **R332.1 General.**

All manufactured homes shall be installed and inspected in accordance with the State of Colorado Manufactured Home Installation Program and the provisions of this section.

### **R332.2 Existing Manufactured Homes**

1. Whenever a manufactured home is in existence in the City on the effective date of the ordinance from which this section derives or was annexed to the City after the effective date and such manufactured home complies with all applicable codes and ordinances then in effect, the manufactured home shall be considered to be legally nonconforming and shall not be subject to the provisions of this section.
2. In the event that any such legally nonconforming manufactured home is removed from its location, the manufactured home shall not be replaced or relocated, except in conformance with all applicable provisions of the building code. In addition, if the use of such manufactured home is discontinued for a period of six consecutive months or more, the manufactured home shall not be reoccupied until it is in conformance with all applicable regulations in the building code.

### **R332.3 Additions, alterations and repairs.**

Additions, alterations and repairs to manufactured homes shall be designed and constructed in accordance with the currently adopted residential code. Additions and alterations shall be structurally independent from the manufactured home.

**Exception:** A structural separation need not be provided when the plans and specifications have been prepared and sealed by a design professional.

### **R332.4 Definition**

MANUFACTURED HOME PARK The terms manufactured home park (MHP) or manufactured home rental community (park) are interchangeable terms for the purposes of this section meaning a unified residential development of manufactured homes arranged on a lot under a single ownership.

### **R332.5 Skirting and permanent perimeter enclosures.**

Skirting and permanent perimeter enclosures shall be installed on all manufactured home within 60 days of approval of the utilities inspection. Skirting shall be of material suitable for exterior exposure and contact with the ground. Permanent perimeter enclosures shall be constructed of materials as required by this code for regular foundation construction.

Skirting shall be installed in accordance with the skirting manufacturer's installation instructions. Skirting shall be adequately secured to assure stability, to minimize vibration and susceptibility to wind damage, and to compensate for possible frost heave.

All skirting shall have one or more openings not less than 18 inches (457 mm) in any dimension and not less than 3 square feet (.2787 m<sup>2</sup>) in area so constructed and located to allow convenient access to all points of utilities connections. The location and design of such openings shall be approved by the Building Inspection Division.

### **R332.6 Smoke detectors.**

Manufactured homes built prior to March 2003 shall be equipped with battery powered smoke detectors with a battery rated for a 10-year life, provided the smoke detector is listed for use with a 10-year battery. The smoke detectors shall be placed as required by the currently adopted residential code.

Manufactured homes built in March 2003 and later shall have each smoke detector powered from either the electrical system of the home as the primary power source and a battery as a secondary power source; or a battery rated for a 10-year life, provided the smoke detector is listed for use with a 10-year battery. The smoke detectors shall be placed as required by the currently adopted residential code.

Regardless of the power source, smoke detectors are required to be interconnected such that the activation of any one smoke detector will cause the alarm to be triggered in all required smoke detectors in the home.

### **R332.7 Carbon monoxide detectors.**

Carbon monoxide detectors shall be installed in accordance with the provisions of Section R315 of this code.

### **R332.8 Accessory buildings and structures.**

The following general requirements apply to all mobile home accessory buildings and structures:

1. Location on space. Accessory buildings and structures shall not obstruct required openings for light and ventilation of the mobile home and shall not prevent inspection of mobile home equipment and utility connections.
2. Construction. Every accessory building or structure shall be designed and constructed in accordance with the applicable provisions of all City building and construction codes, laws and ordinances.

All awnings and carports within manufactured home parks shall conform with the following specific requirements:

1. Generally. An awning or carport may be erected, constructed or maintained on a manufactured home space only as an accessory to a manufactured home located on the same space. An awning shall not be enclosed with rigid materials or walls or converted for use as a habitable room or cabana, unless the completed construction complies with all the requirements for a cabana.

2. Location. Awnings or carports may be attached to the manufactured home when in compliance with Section R328.3

3. Exits from awning enclosure. An awning with enclosures of non-rigid materials shall have at least one door in the enclosure opening directly to the outside of the enclosure. The opening shall be not less than 28 inches (711 mm) in width nor less than six feet, two inches in height (1880 mm). Two such door openings shall be provided from the enclosure when the enclosure encloses two doors of the manufactured home.

Cabanas within manufactured home parks shall conform with the following specific requirements:

1. Design and construction. A cabana shall be designed and constructed as a structurally independent structure. A cabana may be attached to a manufactured home with appropriate flashing or sealing materials to provide a weather seal.

2. Dimensions.

a. The height of a cabana shall not exceed the height of the manufactured home.

b. A cabana shall have a minimum ceiling height of seven feet (2134mm) from the finished floor. If the ceiling or roof is sloped, one-half of the sloped ceiling area shall meet the minimum ceiling height. No portion of any room having a ceiling height of less than five feet (1524 mm) shall be considered as contributing to the minimum area required in this subsection.

c. Habitable rooms shall be not less than seven feet (2134 mm) in any horizontal dimension.

**Subsection R405.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

#### **R405.1 Concrete or masonry foundations.**

Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below *grade*. Drainage tiles, gravel or crushed stone drains, perforated pipe or other *approved* systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall be designed to collect in a sump and discharge by gravity ~~and/or~~ mechanical means into an *approved* drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an *approved* filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be

surrounded with an *approved* filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

~~**Exception:** A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.~~

**Subsection R408.4** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined, to read as follows:

#### **R408.4 Access.**

Access shall be provided to all under-floor spaces. Access openings through the floor shall be not smaller than ~~18~~22 inches by ~~24~~30 inches ~~(457 mm by 610 mm)~~(559mm by 762mm). Openings through a perimeter wall shall be not less than 16 inches by 24 inches (407 mm by 610 mm). Where any portion of the through-wall access is below grade, an areaway not less than 16 inches by 24 inches (407 mm by 610 mm) shall be provided. The bottom of the areaway shall be below the threshold of the access opening. Through wall access openings shall not be located under a door to the residence. See Section M1305.1.4 for access requirements where mechanical equipment is located under floors.

A new *Subsection R908.1.1* is hereby enacted by the addition of the words double-underlined to read as follows:

#### **R908.1.1 Extent of replacement.**

When more than one square of asphalt shingles are required to be replaced over the aggregate area of the roof and a permit is required, every slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

**Subsection P2603.5** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

#### **P2603.5 Freezing.**

In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2 (1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe between the tap of the main water line and the meter shall be installed not less than 48 inches (1219 mm) below finish grade, and the water service pipe from the meter to the building shall be install not less than ~~42 inches (305 mm) deep and not less than 6 inches (152 mm) below the frost line.~~

**Subsection P2603.5.1** is hereby repealed and reenacted to read as follows:

**P2603.5.1 Sewer depth.** Building sewers shall be not less than 12 inches (305 mm) below grade.

**Subsection P2903.3.2** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**P2903.3.2 Maximum pressure.**

The maximum static water pressure shall be not greater than 80 psi (551 kPa). ~~When main pressure exceeds 80 psi (551 kPa), an~~An approved pressure-reducing valve conforming to ASSE 1003 or CSA B356 shall be installed on the domestic water branch mains or risers at the connection to the water-service pipe.

**Section 10-174** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-174. International Energy Conservation Code adopted by reference.**

The International Residential Code, 2024 edition, published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001, is hereby adopted by this reference and incorporated in this Code as the Energy Conservation Code of the City. The purpose and subject matter of the International Energy Conservation Code includes the design and installation of energy-efficient building envelopes and energy efficient mechanical, lighting and power systems. Except as otherwise provided in this Code, the International Energy Conservation Code, 2024 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

**Section 10-175** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-175. Amendments to the International Energy Conservation Code.**

The International Energy Conservation Code adopted in Section 10-174 is amended as follows, with section numbers referring to section numbers of the International Energy Conservation Code:

**Subsection C101.1** is hereby amended by the deletion of the words stricken and addition of the words double-underlined to read as follows:

**C101.1 Title.**

This code shall be known as the *Energy Conservation Code of* the City of Thornton ~~[NAME OF JURISDICTION]~~ and shall be cited as such. It is referred to herein as “this code.”

**Subsection R101.1** is hereby amended by the deletion of the words stricken and addition of the words double-underlined to read as follows:

**R101.1 Title.**

This code shall be known as the *Energy Conservation Code of the City of Thornton* ~~[NAME OF JURISDICTION]~~, and shall be cited as such. It is referred to herein as “this code.”

**Section 10-176** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-176. International Existing Building Code adopted by reference.**

The International Existing Building Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001. The purpose and subject matter of the International Existing Building Code includes regulating construction aspects of building and providing greater safety to the public and uniformity in building laws. The International Existing Building Code, 2024 edition, is hereby adopted by this reference and incorporated into this Code as the existing building construction code of the City. Except as otherwise provided in Section 10-178, the International Existing Building Code, 2024 edition, is adopted in full including the outline of contents and the index but excluding all appendix chapters.

**Section 10-177** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-177. Amendments to the International Existing Building Code.**

The International Existing Building Code adopted in Section 10-176 is amended as follows, with section numbers referring to section numbers of the International Existing Building Code:

**Subsection 101.1** is hereby amended by the deletion of the words stricken and by the addition of the words double-underlined to read as follows:

**[A] 101.1 Title.** These regulations shall be known as the *Existing Building Code of the City of Thornton* ~~[NAME OF JURISDICTION]~~, hereinafter referred to as “this code.”

**Subsection 101.2** is hereby amended by the addition of the words double-underlined to read as follows:

**[A] 101.2 Scope.**

The provisions of this code shall apply to the *repair, alteration, change of occupancy, addition and relocation of existing buildings*. The relocation of existing buildings shall also comply with City Code Section 18-570.

**Section 202 General Definitions** is hereby amended by the addition of the words double-underlined to read as follows:

**COLD WEATHER CARE HOUSING.**

Places of religious worship within the City that allow the temporary housing of homeless persons during the months of October through March.

[BS] DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below or meets the definition of dangerous as stated in the Uniform Code for the Abatement of Dangerous Buildings shall be deemed *dangerous*:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under permanent, routine or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake or other environmental loads when such loads are imminent.

**Section 308.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**308.1 Carbon monoxide detection.**

Where an addition, alteration, change of occupancy or relocation of a building is made to Group I-1, I-2, I-4 and R occupancies and classrooms of Group E occupancies, or where one or more sleeping rooms are added or created in existing dwellings, the existing building shall be provided with carbon monoxide detection in accordance with the International Fire Code or Section R315 of the International Residential Code.

**Exceptions:**

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2. Installation, alteration or repairs of plumbing or mechanical systems, other than fuel-burning appliances.
- ~~3. Work classified as Level 1 Alterations in accordance with Chapter 7.~~
- ~~4.~~

**Section 705** is hereby repealed in its entirety. Please refer to Section 1511 of the *International Building Code*.

**Subsection 1011.2.1** is hereby amended by the addition of the words double-underlined to read as follows:

**1011.2.1 Fire sprinkler system.**

Where a change in occupancy classification occurs or where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the International Building Code. The installation of the automatic sprinkler system shall be required within the area of the change of occupancy and areas of the building not separated horizontally and vertically from the change of occupancy by one of the following:

1. Nonrated permanent partition and horizontal assemblies.
2. Fire partition.
3. Smoke partition.
4. Smoke barrier.
5. Fire barrier.
6. Fire wall.

**Exceptions:**

1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the International Residential Code.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the International Residential Code.
3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the International Residential Code.
4. Group A-3 places of religious worship participating in the Cold Weather Care Housing, as defined in Chapter 2, in which the aggregate sleeping areas are less than ten percent (10%) of the building area for each story that is used as an aggregate sleeping area.

**Section 10-179** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-179. – International Swimming Pool and Spa Code adopted by reference.**



The International Swimming Pool and Spa Code, 2024 edition, is published by the International Code Council, Inc. 500 New Jersey Avenue, NW, 6<sup>th</sup> Floor, Washington, D.C. 20001. The purpose and subject matter of the International Swimming Pool and Spa Code includes regulating construction aspects of building and providing greater safety to the public and uniformity in building laws. The International Swimming Pool and Spa Code, 2024 edition, is hereby adopted by this reference and incorporated into this Code as the Swimming Pool and Spa Construction Code of the City. Except as otherwise provided in Section 10-180, the International Swimming Pool and Spa Code is adopted in full, including outline of contents and index, but excluding all appendix chapters.

**Section 10-180** of the Thornton City Code is hereby repealed and reenacted to read as follows:

**Sec. 10-180. - Amendments to International Swimming Pool and Spa Code.**

The International Swimming Pool and Spa Code adopted in Section 10-179 is hereby amended with section numbers referring to section numbers of the International Swimming Pool and Spa Code, to read as follows:

**Subsection 101.1** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**101.1 Title.**

These regulations shall be known as the *Swimming Pool and Spa Code* of the City of Thornton~~[NAME OF JURISDICTION]~~, hereinafter referred to as “this code.”

**Subsection 202 Definitions Residential Swimming Pool** is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**Residential Swimming Pool (Residential Pool).**

A pool intended for use that is accessory to a ~~residential setting~~ One and Two-Family Dwelling and available only to the household and its guests. Other pools shall be considered to be *public pools* for purposes of this code.

Types I – V. Residential pools suitable for the installation of diving equipment by type.

Type O. A non-diving residential pool.

**Subsection 202 Definitions** is hereby amended by the addition of the words double-underlined to read as follows:

**Public Swimming Pool (Public Pool).**

A pool, other than a residential pool, that is intended to be used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. Public pools shall be further classified and defined as follows:

**CLASS C, semi-public pool.** A pool operated solely for and in conjunction with lodgings such as hotels, motels, apartments, townhomes, or condominiums

If any portion of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the constitutionality or validity of the remaining portions of this ordinance. City Council hereby declares that it would have passed this ordinance and each part hereof irrespective of the fact that any one part be declared unconstitutional or invalid.

All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

The repeal or amendment of any provision of the Code by this ordinance shall not release, extinguish, alter, modify, or change in whole or in part any penalty, forfeiture, or liability, either civil or criminal, which shall have been incurred under such provision, and each provision shall be treated and held as still remaining in force for the purpose of sustaining any and all proper actions, suits, proceedings, and prosecutions for the enforcement of the penalty, forfeiture, or liability, as well as for the purpose of sustaining any judgment, decree, or order which can or may be rendered, entered, or made in such actions, suits, proceedings, or prosecutions.

This ordinance shall take effect on July 1, 2025.

INTRODUCED, READ, PASSED on first reading, ordered posted in full, and title ordered published by the City Council of the City of Thornton, Colorado, on \_\_\_\_\_, 2025.

PASSED AND ADOPTED on second and final reading on \_\_\_\_\_, 2025.

CITY OF THORNTON, COLORADO

\_\_\_\_\_  
Jan Kulmann, Mayor

ATTEST:

\_\_\_\_\_  
Kristen Rosenbaum, City Clerk

INTRODUCED BY: \_\_\_\_\_

AN ORDINANCE REPEALING AND REENACTING SECTIONS 10-160 AND 10-161 OF THE THORNTON CITY CODE TO ADOPT BY REFERENCE THE 2024 INTERNATIONAL FIRE CODE AND LOCAL AMENDMENTS THERETO.

WHEREAS, the City of Thornton ("City") adopted the 2021 International Fire Code on March 14, 2023, as the City's fire code; and

WHEREAS, the 2024 International Fire Code represents standards that have been updated and amended to conform with changing fire protection methods; and

WHEREAS, it is deemed to be in the best interests of the citizens of the City and necessary to promote the public health, safety and general welfare to adopt by reference the 2024 International Fire Code and local amendments thereto.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF THORNTON, COLORADO, AS FOLLOWS:

1. Section 10-160 of the Code is hereby repealed and reenacted to read as follows:

Sec. 10-160. International Fire Code adopted by reference.

The International Fire Code, 2024 edition, promulgated by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60408, is adopted by reference thereto and incorporated into this Code as the Fire Code of the city. The purpose and subject matter of the International Fire Code is to establish minimum regulations that promote safety and safeguard life and property from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises and to provide safety to firefighters and emergency responders during emergency operations. Except as may be otherwise provided in Section 10-161, the International Fire Code is adopted in full, including the standards, outline of contents, the index contained therein, but only Appendix B and C.

2. Section 10-161 of the Code is hereby repealed and reenacted to read as follows:

Sec. 10-161. Amendments to International Fire Code.

The International Fire Code, adopted in Section 10-160, is hereby amended to read as follows, with section numbers referring to section numbers of the International Fire Code;

*Subsection 101.1* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**101.1 Title.** These regulations shall be known as the *Fire Code* of ~~[NAME OF JURISDICTION]~~ the City of Thornton, hereinafter referred to as “this code.”

*Subsection 102.7* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**102.7 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 80, except as amended by this reference, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated by Sections 102.7.1 and 102.7.2.

References to National Fire Protection Association (“NFPA”) standards listed in Chapter 80 are hereby amended to read as follows:

<u>NFPA</u>	
<u>Standard reference number</u>	
(a)	<u>13-25</u>
(b)	<u>13D-25</u>
(c)	<u>13R-25</u>
(d)	<u>25-11</u>
(e)	<u>72-25</u>

*Subsection 103* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**SECTION 103**  
**CODE COMPLIANCE AGENCY**  
**FIRE PREVENTION DIVISION**

*Subsection 103.1* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**103.1 Creation of agency.** The ~~[insert name of department]~~ Fire Prevention Division is hereby created and the official in charge thereof shall be known as the *fire code official*. The function of the ~~agency~~ Division shall be the implementation, administration and enforcement of the provisions of this code.

*Subsection 103.2* is hereby repealed in its entirety.

*Subsection 103.3* is hereby repealed in its entirety.

*Subsection 104.8* is hereby repealed and reenacted to read as follows:

**104.8 Liability.** The fire chief, *fire code official* and other individuals charged with the control or extinguishment of any fire, the enforcement of this code or any other official duties, acting in good faith and without malice in the discharge of their duties, shall not thereby be rendered personally liable for any damage that may accrue to persons or property as a result of any act or by reason of any act or omission in the discharge of their duties. This code shall not be construed to relieve from or lessen the responsibility of any persons owning, operating, or controlling any building, structure or facility for damages to persons or property caused by defects, nor shall the Thornton Fire Department or the City be held as assuming any such liability by reason of the inspections authorized by this code or any certificates of inspection or permits issued under this code.

*Subsection 104.8.1* is hereby repealed in its entirety.

A new *subsection 105.1.7* is hereby enacted to read as follows:

**105.1.7 Fees.** The fee for construction permits shall be as set forth in an amount as determined from time to time by resolution of the City Council, and shall be collected by the City of Thornton Building Inspection Division.

*Subsection 105.2* is hereby amended by the addition of the words double-underlined to read as follows:

**105.2 Application.** Application for a permit required by this code shall be made to the *fire code official* in such form and detail as prescribed by the *fire code official*. Applications for construction permits shall be submitted to the Building Inspection Division prior to the issuance of a building permit, when applicable. A deferred submittal of construction permits may be approved by the building code official and fire code official, when requested. Applications for permits shall be accompanied by such plans as prescribed by the *fire code official*.

*Subsection 105.5.34* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**105.5.34 Mobile food preparation vehicles.** An operational permit is required for ~~mobile food preparation vehicles equipped with appliances that produce smoke or grease laden vapor~~ a motorized or towed wheeled vehicle that is designed, equipped and used to prepare, or serve, and sell food at a transitory or static location.

*Subsection 105.5.36* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**105.5.36 Open burning.** An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be ~~complied with~~ adhered to.

**Exception:** ~~Recreational fires~~ Fires located at Group R-3 occupancies contained by a commercially available chiminea, outdoor fireplace or fire pit, or other approved method having a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.

*Subsection 106.1* is hereby repealed and reenacted to read as follows:

**106.1 Submittals.** Construction documents shall be submitted via designated City of Thornton submittal system as required by the *fire code official*. Fire protection system construction documents, including shop drawings, calculations, specifications, and other required information, shall be reviewed and signed by a design professional certified as a NICET Level III or IV, as defined by the National Institute for Certification in Engineering Technologies, a Professional Engineer, or other approved certification or equivalent training.

**Exceptions:**

1. Design professional review is not required for alterations to existing fire sprinkler systems involving the addition or relocation of less than 20 sprinklers, provided the work does not have an adverse effect on the integrity or performance of the existing system.
2. Design professional review is not required for alterations to existing fire alarm systems involving the addition or relocation of less than 5 devices, provided the work does not have an adverse effect on the integrity or performance of the existing system.

*Subsection 108.1* is hereby repealed and reenacted to read as follows:

**108.1 Fees.** The fee for inspections shall be as set forth in an amount as determined from time to time by resolution of the City Council, and shall be collected by the Building Inspection Division.

*Subsection 110.3* is hereby amended by the addition of the words double-underlined to read as follows:

**110.3 Recordkeeping.** A record of periodic inspections, tests, servicing and other operations and maintenance shall be maintained on the premises or other *approved* location for not less than 3 years, or a different period of time where specified in this code or referenced standards. Records shall be made available for inspection by the *fire code official*, and a copy of the records shall be provided to the *fire code official* on request.

The *fire code official* is authorized to prescribe the form and format of such recordkeeping. The *fire code official* is authorized to require that certain required records be filed with the *fire code official*.

All inspection, testing and maintenance reports shall be submitted to the designated City of Thornton Fire Department recordkeeping system no later than 15 days after the service date. System impairment reports shall be submitted immediately.

Subsection 112.1 is hereby repealed in its entirety.

Subsection 113.4 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**113.4 Violation penalties.** It shall be unlawful for any persons who shall to violate a provision of this code or ~~shall~~ fail to comply with any of the requirements thereof or ~~who shall to~~ erect, install, alter, repair or do work in violation of the *approved construction documents* or directive of the *fire code official*, or of a permit or certificate used under provisions of this code. Except as otherwise provided in this code, any person who is found guilty, pleads guilty, or pleads *nolo contendere* to a violation of this code shall be punished shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment as provided in Section 1-8(a) of the Thornton City Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense. A violation of any provision of this code is declared to be a serious threat to public health and safety.

Subsection 114.4 is hereby repealed in its entirety.

Section 202 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**202 General Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**AUTOMATIC EXTERNAL DEFIBRILLATOR (AED).** A computerized medical device manufactured under the guidelines of the Food and Drug Administration (FDA).

**BONFIRE.** An outdoor fire utilized-Open burning in an outdoor location for ceremonial purposes.

**NOVELTY.** A device containing small amounts of pyrotechnic and/or explosive composition. Such devices produce limited visible or audible effects.

**OPEN BURNING.** The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include barbecue grills, road flares, smudgepots and similar devices associated with safety or occupational uses typically considered open flames, ~~recreational fires~~ or use of portable outdoor fireplaces. For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.



**PLUGGED AND ABANDONED WELL.** Oil and gas wells that have been cemented and the associated production facilities have been removed in accordance with Colorado Oil and Gas Conservation Commission regulations.

**POPPER.** An object commonly used at parties. It emits a loud popping noise by means of a small friction-actuated explosive charge that is activated by pulling a string. The charge or compressed air blows out some confetti or streamers and emits a popping sound.

**RECREATIONAL FIRE.** An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, portable outdoor fireplace, barbeque grill or barbeque pit and has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height for pleasure, religious, ceremonial, cooking, warmth or similar purposes.

**SILVICULTURE.** A branch of forestry dealing with the development and care of forests.

**SNAPPERS.** Small paper balls filled with a friction-sensitive composition that lets off a loud 'bang' when thrown against a hard surface.

Subsection 304.1.1 is hereby repealed and reenacted to read as follows:

**304.1.1 Valet trash.** Trash valet services require an operational permit. *Valet trash collection* service shall be permitted only where approved. The *owner* and *valet trash collection* service provider shall comply with the requirements and limitations established by the City of Thornton. Failure to comply will result in permit being revoked.

Subsection 305.4 is hereby repealed and reenacted to read as follows:

**305.4 Arson.** It shall be unlawful for a person to intentionally, knowingly or recklessly, within the City, do the following:

1. Start or maintain a fire or cause an explosion on public property or private property unless specifically exempted, as provided herein.

**Exceptions:**

1. Fires contained in an incinerator, fireplace, or similar approved device when used in accordance with this code and the Thornton City Code.
2. Open burning and open flames conducted in accordance with the provisions of this code and the Thornton City Code.
2. Set fire to, burn, cause to be burned, or by the use of any explosive, damage or destroy, or cause to be damaged or destroyed, the property of another without the consent of the property owner, other than a building or occupied structure,



when such property damaged or destroyed is of a value less than one hundred dollars or the value cannot be ascertained.

**305.4.1 Violation penalties.** Violations of this Section 305.4 shall be punished as provided in Section 1-8(b) of the Thornton City Code.

Section 307 is hereby repealed and reenacted to read as follows:

## **SECTION 307 OPEN BURNING**

**307.1 General.** It shall be unlawful for a person to kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with this section. It shall be unlawful to violate any condition or requirement of an Open Burning permit issued pursuant to this Section 307.

**307.1.1 Approved open burning.** Open burning shall only be conducted for the following purposes or activities:

1. Recognized silvicultural, range or wildlife management practices;
2. Prevention or control of disease or pests;
3. Fires used for the training or demonstration of firefighting, fire investigation, fire extinguisher operation, or other approved similar activities;
4. Bonfires used in a *government-sponsored* or *co-sponsored ceremony*. The terms "*government-sponsored*" or "*co-sponsored*" shall mean sponsored or co-sponsored by the state or a political subdivision of the state or the federal government or agency thereof;
5. Fires contained by a commercially available chiminea, outdoor fireplace or fire pit, or other approved method having a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.

**307.2 Permit required.** A permit shall be obtained from the *fire code official* in accordance with Section 105.6 prior to kindling a fire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

**307.2.1 Authorization from other agencies.** Where required by state or local law or regulations, open burning shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

**307.2.2 Permit restrictions.** Open burning may be restricted or prohibited on any day at any time due to current or expected weather conditions and/or fire behavior. Open burning that may pose a health risk because of smoke or odor emissions due to atmospheric conditions or local circumstances shall be prohibited. The *fire code official* is authorized to order the extinguishment, by the permit holder or the fire department, of open burning which creates or adds to a hazardous or potentially hazardous situation or condition.

**307.3 Location.** The location for open burning shall not be less than 50 feet (15,240 mm) from any occupiable structure and appurtenances, and provisions shall be made to prevent the fire from spreading to within 50 feet (15,240 mm) of any structure.

**Exceptions:**

1. The minimum required distance from a structure shall be 15 feet (4,572 mm) where the fuel being burned is wood or other solid fuel and the fire is contained by a commercially available chiminea, outdoor fireplace or fire pit, or other approved method having a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.
2. The minimum required distance from a structure to any point of the burner shall be 5 feet (1,524 mm) where the fuel being burned is natural gas or propane and the fire is contained by a commercially available chiminea, outdoor fireplace or fire pit, or other approved method having a burner of 3 feet (914 mm) or less in diameter with a maximum flame height of 2 feet (610 mm).

**307.4 Container construction.** Commercially available chimineas, outdoor fireplaces, fire pits and similar approved containers shall be constructed of metal, concrete, or other approved non-combustible materials. For fires located at Group R-3 occupancies where the fuel being burned is wood or other combustibles that emit sparks and embers, all openings shall be covered with wire mesh or other screening materials that will prevent the passage of sparks and embers.

**307.5 Attendance.** Open burning shall be constantly attended until the fire is extinguished. As required by the *fire code official*, a minimum of one portable fire extinguisher with a minimum 4-A rating and complying with Section 906, or other approved on-site fire-extinguishing equipment, such as dirt, sand, water, barrel, garden hose or water truck, shall be available for immediate utilization.

**307.6 Weather conditions.** Open burning is prohibited on windy or gusty days; surface wind speeds shall not exceed 15 miles per hour (24 kilometers per hour). The *fire code official* may also determine an acceptable wind direction if a particular wind direction may result in a hazardous fire or smoke condition.

**307.7 Time.** Open burning shall take place after sunrise and be completed before sunset unless an alternate time is specifically approved by the fire code official.

Subsection 308.1.7 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**308.1.7 Sky lanterns.** A person shall not release or cause to be released ~~an untethered-a~~ sky lantern.

Subsection 311.5 is hereby repealed in its entirety.

*Subsection 311.6* is hereby amended by the deletion of the words stricken to read as follows:

**311.6 Unoccupied tenant spaces in ~~mall~~ buildings.** Unoccupied tenant spaces in ~~covered and open mall~~ buildings shall be:

1. Kept free from the storage of any materials.
2. Separated from the remainder of the building by partitions of not less than 0.5-inch-thick (12.7 mm) gypsum board or an *approved* equivalent to the underside of the ceiling of the adjoining tenant spaces.
3. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
4. Kept free from combustible waste and be broomswept clean.

*A Subsection 403.9* is hereby amended by the addition of the double-underlined words to read as follows:

**403.9 Group R occupancies.** Group R occupancies shall comply with Sections 403.9.1 through 403.9.3.4. In addition, an Emergency Action Plan shall be provided where required by the fire code official in the interest of the special population and hazard identified in the occupancy.

A new Section 408 is hereby enacted to read as follows:

#### **Section 408**

##### **Automatic External Defibrillator (AED)**

**408.1 Where required.** Approved Automatic External Defibrillators (AED's) in new buildings and structures shall be provided in the locations described in this section.

**408.1.1 Group A.** An AED shall be provided in all Group A occupancies with an occupant load of 1,000 or more.

**408.1.2 Group E.** An AED shall be provided in Group E occupancies with a fire area greater than 20,000 square feet (1,858 square meters).

**408.1.3 Group I.** An AED shall be provided in buildings with a Group I fire area.

**Exception:** A Group I facility with any type defibrillator.

**408.1.4 Group M.** An AED shall be provided in Group M occupancies with a fire area greater than 50,000 square feet (4,645 square meters).

**408.1.5 Group R.** An AED shall be provided in Group R occupancies with an occupant load of 500 or more per building.

**408.1.6 High-rise.** An AED shall be provided in all buildings classified as high-rise in accordance with the currently adopted International Building Code.

**408.2 Installation requirements.** AED's shall be installed in accordance with Sections 408.2.1 through 408.2.4.

**408.2.1 Location.** AED's shall be stored in a conspicuous location approved by the fire code official.

**408.2.2 Hangers and brackets.** AED's not stored in cabinets shall be installed on hangers or brackets securely anchored to the mounting surface in accordance with the manufacturer's installation instructions.

**408.2.3 Cabinets.** Cabinets used to house AED's shall not be locked or shall be provided with a means of ready access.

**408.2.4 Height above floor.** AED's shall be installed so that the top is not more than 5 feet (1,524 mm) above the floor. The clearance between the floor and the bottom of installed AED's shall not be less than 9 inches (228 mm).

**408.3 Testing and maintenance.** AED's shall be inspected, tested, and maintained in accordance with the manufacturer's specifications.

**408.3.1 Records.** Records of all inspection, tests, and maintenance shall be maintained on the premises for a minimum of three years and a copy shall be provided to the *fire code official* upon request.

**408.3.2 Registration.** AED's shall be registered with the Thornton Fire Department.

**408.3.3 Usage.** The use of an AED shall be reported to the Thornton Fire Department.

*Subsection 503.1.1* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**503.1.1 Buildings and facilities.** *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the *exterior walls* of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

**Exceptions:**

1. The *fire code official* is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:
  - 1.1 The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, ~~903.3.1.2 or 903.3.1.3.~~ provided that access roads are extended to

within 150 feet (45,720 mm) of at least one approved side of the building.

1.2 The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.2, provided that the dimension does not exceed 200 feet (60,960 mm).

4.2.1.3 Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.

4.3.1.4 There are not more than two Group R-3 or Group U occupancies, provided that access roads are extended to within 150 feet (45,720 mm) of at least one approved side of the building.

Subsection 503.1.2 is hereby repealed and reenacted to read as follows:

**503.1.2 Additional access.** At least two separate and approved fire apparatus access roads shall be provided to the following occupancies, buildings, and facilities:

1. Occupancies in Group A with an occupant load greater than 100, and Groups E, F-1, H, I, R-1, R-2, and S-1.
2. Occupancies in Groups R-3, R-4 and buildings constructed in accordance with the *International Residential Code*, as adopted by the City of Thornton in Section 10-164, located on dead-end roads greater than 500 feet (152 meters) in length.
3. Buildings and facilities containing high-piled combustible storage.
4. Buildings and facilities required to provide aerial fire apparatus access roads in accordance with Section 503.2.1.1.
5. Buildings and facilities with a required fire flow of 2,000 gallons per minute (7,571 liters per minute) or greater.
6. Buildings and facilities with an aggregate building area in excess of 62,000 square feet (5760 m<sup>2</sup>).
7. The fire code official may require more than one fire apparatus access based on the potential for impairment caused by vehicle congestions, climatic conditions or other factors that could limit access.

Subsection 503.2.1 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, ~~except for approved security gates in accordance with Section 503.6,~~ and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

**Exception:** Approved traffic-control devices as approved by Development Engineering and the Thornton Fire Department.

New subsections 503.2.1.1, 503.2.1.1.1, 503.2.1.1.2, and 503.2.1.1.3 are hereby enacted to read as follows:

**503.2.1.1 Aerial fire apparatus access roads.** Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with at least one *approved* fire apparatus access road capable of accommodating fire department aerial apparatus during firefighting operations. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.

**Exception:** Buildings equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

**503.2.1.1.1 Width.** Designated aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm).

**503.2.1.1.2 Proximity to building.** The centerline of designated aerial fire apparatus access roads shall be located no less than 15 feet (3048 mm) and no more than 30 feet (9144 mm) from the roofline of the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the *fire code official*.

**503.2.1.1.3 Obstructions.** Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the *fire code official*.

*Subsection 503.2.4* is hereby amended by the addition of the words double-underlined and the deletion of the word stricken to read as follows:

**503.2.4 Turning radius.** The required turning radius of a fire apparatus access road shall be determined a minimum of 25 feet (7,620 mm) inside and 50 feet (15,240 mm) outside or as approved by the *fire code official*.

*Subsection 503.2.5* is hereby amended by the addition of the words double-underlined and the deletion of the word stricken to read as follows:

**503.2.5 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus in accordance with Appendix D Sections D103.1 and D103.4 of this code.

*Subsection 503.2.7* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**503.2.7 Grade.** The grade of the fire apparatus access road shall ~~be within the limits established by the fire code official based on the fire department's apparatus not exceed 7%.~~ The grade of an aerial fire apparatus access road shall not exceed 5%.

*Subsection 503.4.1* is hereby repealed and reenacted to read as follows:

**503.4.1 Traffic calming devices.** The location and design of speed bumps, traffic circles, and similar traffic calming devices on public and private roads are required to be approved by Development Engineering and the Thornton Fire Department.

*New subsections 503.5.2, 503.5.3, and 503.5.3.1* are hereby enacted to read as follows:

**503.5.2** Where leaf swing barrier gate(s) are used, they shall comply with the following:

1. Leaf swing barrier gate posts and receiver posts shall be set not less than 3 feet (914 mm) deep in a concrete footing of not less than 3 inches (77 mm) in diameter.
2. The leaf swing shall be painted safety yellow.
3. Leaf swing shall provide an opening which clears the width of the roadway. No component of the gate assembly shall protrude into the roadway.
4. Chains used to assist with securing of the leaf swing shall be galvanized 3/8 inch (9.525 mm) diameter link with a Knox padlock.
5. Gates shall be approved by the *fire code official*.

**503.5.3** Where gate(s) cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions an *approved* bollard(s) and chain system may be permitted to be installed per approval by the *fire code official*.

**503.5.3.1** Bollards and chain shall comply with the following:

1. Bollard(s) shall be constructed of steel not less than 4 inches (102 mm) in diameter. Bollards may be hollow or concrete filled.
2. A cap or other device covering for the top shall be in place to prevent water from accumulating inside.
3. The bollard(s) shall be set not less than 3 feet (918 mm) deep in a concrete footing of not less than an 18 inch (459 mm) diameter.
4. The bollard(s) shall be set with the top of the bollard not less than 4 feet (1224 mm) above ground.
5. Bollard(s) shall be painted safety yellow.
6. Bollards shall have a minimum of 3/8 inch (9.525 mm) wide bent metal or rod welded to the bollard facing the fire lane. The opening created by the bent metal or rod shall be a 3 inch (77 mm) opening for the chain to be thread through it.



7. Bollard(s) shall be located not less than 21 feet (6426 mm) apart inside measurement.
8. Chains shall be galvanized 3/8 inch (9.525 mm) diameter link with a minimum length of 22 feet (6732 mm).
9. Chains shall be secured on one end by a Knox padlock and a ¼ inch (6.35 mm) case hardened shank commercial lock belonging to the *owner* of the property on the opposite side.
10. Chains shall have reflective No Parking - Fire Lane signs meeting Thornton's sign regulations, bolted to the chain at the middle of each 10 foot (3048 mm) section of chain.
11. A bollard system shall be approval by the *fire code official*.

New *subsections 503.6.1 and 503.6.2* are hereby enacted to read as follows:

**503.6.1** Where electrically operated security gates are installed in areas with a residential occupancy, they shall have the following means of emergency operation:

1. An *approved* key switch.
2. A touch-pad that will accept an *approved* fire department code or access card.
3. An approved traffic control device that complies with Section 700 of the City of Thornton's Standards and Specifications for the Design and Construction of Public Improvements, as defined in Section 1-2 of the Thornton City Code.
4. Automatic opening upon loss of power.
5. The capability of being manually opened.

**503.6.2** Where electrically operated security gates are installed in commercial areas they shall have the following means of emergency operation:

1. An *approved* key switch.
2. A touch-pad that will accept an *approved* fire department code or access card.
3. Automatic opening upon loss of power.
4. The capability of being manually opened.
5. An *approved* traffic control device if a gate is in the path of a designated emergency access road or lane and does not have 24-hour staffing. The traffic control device shall comply with Section 700 of the City of Thornton's Standards and Specifications for the Design and Construction of Public Improvement, as adopted by the City of Thornton.

A new *subsection 504.1.1* is hereby enacted to read as follows:

**504.1.1 Slope.** The slope of the ground within 15 feet (3048 mm) of the perimeter of the building, as measured from the edges of roof eave overhangs, shall not exceed the following:

1. 5 percent, as measured parallel to the face of the exterior walls.
2. 10 percent, as measured perpendicular to the face of the exterior walls.



**Exceptions:**

1. Buildings equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. Where an *approved* path cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.
3. Where there are not more than two Group R-3 or Group U occupancies.
4. An alternative distance for buildings less than 3 stories in height as *approved by the fire code official*.
5. Where access to a side or portion of a building does not require ladder access as *approved by the fire code official*.

Subsection 505.1 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**505.1 Address identification.** New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than ~~4 inches (102 mm)~~ 6 inches (152.4 mm) high with a minimum stroke width of ~~1/2 inch (12.7 mm)~~ 3/4 inch (19.05 mm). Where required by the *fire code official*, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

**Exception:** Existing buildings with previously approved address numbers that are visible from the street.

Subsection 506.1 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**506.1 Where required.** ~~Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the fire code official is authorized to require~~ All buildings and facilities with a monitored fire protection system shall be provided with a key box to be KnoxBox installed in an *approved* location. The ~~key box~~ KnoxBox shall ~~be of an approved type listed in accordance with UL 1037, and~~ contain keys to gain necessary access as required by the *fire code official*.

Subsection 507.3 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**507.3 Fire flow.** Fire-flow requirements for buildings or portions of buildings and facilities shall be determined ~~by an approved method in accordance with Appendix B as amended by the City of Thornton.~~

*Subsection 507.5* is hereby amended by the addition of the words double-underlined to read as follows:

**507.5 Fire hydrant systems.** Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C as amended by the City of Thornton.

*Subsection 507.5.1.1* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**507.5.1.1 Hydrant for standpipe and/or fire sprinkler systems.** Buildings equipped with a standpipe and/or fire sprinkler system installed in accordance with Section 905 shall have a fire hydrant within ~~100 feet (30,480 mm)~~ 50 feet (15,240 mm) of the fire department connections.

**Exception:** The distance shall be permitted to exceed ~~100 feet (30,480 mm)~~ 50 feet (15,240 mm) where *approved by the fire code official.*

A new *Subsection 507.5.1.2* is hereby enacted to read as follows:

**507.5.1.2 Hydrant looped system.** Commercial and High-Density Residential Areas requiring more than one hydrant or having more than one hydrant shall have hydrants interconnected into a looped system.

**507.5.1.2.1** Residential Subdivisions which require more than one emergency access shall have a looped hydrant system connected from separate feeder lines.

*Subsection 507.5.5* is hereby amended by the addition of the words double-underlined to read as follows:

**507.5.5 Clear space around hydrants.** A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or *approved.* Landscaping within the clear space shall be limited to mulch or ground cover height plant material.

*Subsection 510.2* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**510.2 Emergency responder communications enhancement system in existing buildings.** Existing buildings ~~shall be provided with approved in-building emergency responder communications enhancement system for emergency responders as required in Chapter 11 other than Group R-3 that do not have approved emergency responder communications enhancement system for emergency responders in the~~

building based on existing coverage levels of the public safety communication systems, shall be equipped with such coverage according to one of the following:

1. Where an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1.
2. Within a timeframe established by Thornton Fire Prevention

**Exception:** Where it is determined by the fire code official that the in-building emergency responder communications enhancement system is not needed.

Subsection 510.4.2.3 is hereby amended by the addition of the words double-underlined to read as follows:

**510.4.2.3 Standby power.** In-building two-way emergency responder communications enhancement systems shall be provided with dedicated standby batteries or provided with 2-hour standby batteries and connected to the facility generator power system in accordance with Section 1203. The standby power supply shall be capable of operating the in-building emergency responder communications enhancement system at 100-percent system capacity for a duration of not less than 12 hours. Where a building fire alarm system is installed, loss of the primary power supply shall be monitored by the building fire alarm system in accordance with NFPA 72.

A new subsection 901.4.1.1 is hereby enacted to read as follows:

**901.4.1.1 Design approach for High-Piled Combustible Storage.** Where the size and height of a building or portion thereof will accommodate High-Piled Combustible Storage, the building shall comply with the fire protection requirements of Chapter 32. The fire protection features required by Chapter 32 shall be based on the most restrictive design requirements, except where modifications are *approved* by the *fire code official*.

A new subsection 901.5.2 is hereby enacted to read as follows:

**901.5.2 Hydrostatic testing of CPVC piping.** Hydrostatic testing of sprinkler systems with CPVC piping shall be performed with *approved* test plugs.

Subsection 901.6.3.1 is hereby repealed in its entirety.

Subsection 903.2.8 is hereby amended by the addition of the words double-underlined to read as follows:

**903.2.8 Group R.** An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

**Exceptions:**

1. Occupancies in Group R-3 with 8 or fewer occupants.
2. Occupancies in Group R-4 with 8 or fewer occupants.

Subsection 903.2.9.4 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**903.2.9.4 Group S-1 upholstered furniture and mattresses.** An *automatic sprinkler system* shall be provided throughout a Group S-1 *fire area* where the area used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

**Exception:** Self-service storage facilities ~~not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior where the individual units are less than 2,500 square feet (232 m<sup>2</sup>).~~

Subsection 903.3.2 is hereby amended by the addition of the words double-underlined to read as follows:

**903.3.2 Quick-response and residential sprinklers.** Where *automatic sprinkler systems* are required by this code, quick-response or residential automatic sprinklers shall be installed in all of the following areas in accordance with Section 903.3.1 and their listings:

1. Throughout all spaces within a *smoke compartment* containing care recipient *sleeping units* in Group I-2 in accordance with the *International Building Code*.
2. Throughout all spaces within a *smoke compartment* containing gas fireplace appliances and decorative gas appliances in Group I-2 in accordance with the *International Building Code*.
3. Throughout all spaces within a *smoke compartment* containing treatment rooms in ambulatory care facilities.
4. *Dwelling units* and *sleeping units* in Group I-1 and R occupancies.
5. Light-hazard occupancies as defined in NFPA 13.

Quick-response or residential automatic sprinklers in Group R dwelling units and sleeping areas in all occupancies shall be used only in wet systems.

Subsection 903.3.9 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**903.3.9 ~~High-rise~~ Multi-story building floor control valves.** *Approved* supervised indicating control valves shall be provided at the point of connection to the riser on each floor in ~~high-rise~~ multi-story buildings.

A new subsection 903.3.10 is hereby enacted to read as follows:

**903.3.10 Zone control valves.** *Approved* supervised indicating control valves are required in occupancy space(s) where the fire area exceeds 12,000 square feet (1114.8 m<sup>2</sup>) and within a structure with multiple occupancies.

*Subsection 903.6* is hereby repealed and reenacted to read as follows:

**903.6 Fire sprinkler riser rooms.** Sprinkler risers shall be located in a room that is readily accessible to fire department personnel as *approved* by the *fire code official*. Access to sprinkler riser rooms shall not be through any portion of residential dwelling units.

*Subsection 904.15* is hereby amended by the addition of the words double-underlined to read as follows:

**904.15 Domestic cooking facilities.** Cooktops and ranges installed in the following occupancies shall be protected in accordance with Section 904.15.1:

1. In Group I-1 occupancies where domestic cooking facilities are installed in accordance with Section 420.9 of the *International Building Code*.
2. In Group I-2 occupancies where domestic cooking facilities are installed in accordance with Section 407.2.7 of the *International Building Code*.
3. In Group R-2 college dormitories where domestic cooking facilities are installed in accordance with Section 420-11 of the *International Building Code*.
4. In Group R-3 occupancies where domestic cooking facilities are installed in addition to the primary kitchen located on the main level.

*Subsection 905.12* is hereby repealed in its entirety.

*Subsection 907.2.7.1.1* is hereby repealed in its entirety.

A new subsection 907.5.2.1.4 is hereby enacted to read as follows:

**907.5.2.1.4 Minimum sound pressure.** The minimum sound pressure levels shall be: 75 dBA in Group I occupancies; 90 dBA in mechanical equipment rooms; and 60 dBA in other occupancies.

**Exception:**

1. Group I occupancies that are staffed 24 hours as approved by the *fire code official*.
2. Occupancies regulated by subsection 907.5.2.1.3.

*Subsection 907.9* is hereby repealed and reenacted to read as follows:

**907.9 Occupancy requirements.** A fire alarm system shall be installed in accordance with Section 907.9.1.

**907.9.1 Group R-2.** A manual and automatic fire alarm system shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling units or sleeping units. Owners shall be permitted three years from the effective date of the ordinance adopting this code to bring any structures into compliance with this section.

**Exceptions:**

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 0.75 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3.
4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both the following:
  - 4.1. Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire-resistance rating of not less than 0.75 hour.
  - 4.2. Each dwelling unit is provided with hardwired, interconnected smoke alarms as required for new construction in Section 907.2.11.

*Subsection 912.2.2* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**912.2.2 Existing Buildings.** ~~On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus,~~ The fire department connection shall be indicated by an approved sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location. Such signs shall be subject to the approval of the fire code official.

A new *subsection 912.8* is hereby enacted to read as follows:

**912.8 Connection details.** For sprinkler and standpipe systems, at least one 2.5-inch (63.5 mm) hose connection shall be provided for each 500 gallons per minute (1,893 liters) per minute of system demand. At least two such connections shall be provided for sprinkler systems installed in accordance with Section 903.3.1.1 and for all standpipe systems.



When the system demand exceeds 1,000 gallons per minute (3,785 liters) per minute, at least one, 5-inch (127 mm), 30-degree pattern hose connection with threadless couplings that are compatible with fire department hose shall be provided. When the system demand exceeds 1,500 gallons per minute (5,678 liters) per minute, at least two such connections shall be provided.

**Exception:** When system demands exceed the pressure limitations of the 5-inch (127 mm) hose or other equipment supplying the fire department connection, the appropriate number of 2.5-inch (63.5 mm) hose connections shall be used.

*Subsections 1031.2, 1031.3.1, and 1031.6 are hereby amended by the addition of the words double-underlined and deletion of the words stricken to read as follows:*

**1031.2 Where required.** In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one *exit* or access to only one *exit* as permitted by Tables 1006.3.4(1) and 1006.3.4(2).
2. Group R-3 and R-4 occupancies.

*Basements* and sleeping rooms below the fourth *story above grade plane* shall have not fewer than one *emergency escape and rescue opening* in accordance with this section. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room, but shall not be required in adjoining areas of the *basement*. Such openings shall open directly into a *public way* or to a *yard or court* that opens to a *public way*, or to an egress balcony that leads to a *public way*.

**Exceptions:**

~~1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.~~

~~21.~~ *Emergency escape and rescue openings* are not required from *basements* or sleeping rooms that have an *exit door* or *exit access door* that opens directly into a *public way* or to a *yard, court* or exterior egress balcony that leads to a *public way*.

~~32.~~ *Basements without habitable spaces and having not more than 200 square feet (18.6 m<sup>2</sup>) in floor area, and having ceiling heights less than required in Section 1208.2,* shall not be required to have *emergency escape and rescue openings*

~~3.~~ *Storm shelters* are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

~~5. Within individual dwelling and sleeping units in Groups R-2 and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:~~

~~5.1. One means of egress and one emergency escape and rescue opening.~~

~~5.2. Two means of egress.~~

4. Emergency escape and rescue openings are not required where existing basements undergo alterations or repairs except that new sleeping rooms created in an existing basement shall be provided with emergency escape and rescue openings that comply with Sections 1031.3 through 1031.6.

**1031.3.1 Minimum size.** *Emergency escape and rescue openings* shall have a minimum net clear opening of 5.7 square feet (0.53 m<sup>2</sup>).

~~**Exception:** The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.46 m<sup>2</sup>).~~

**1031.6 Bars, grilles, covers and screens.** Where bars, grilles, covers, screens, or similar devices are permitted to be placed over *emergency escape and rescue openings*, or area wells that serve such openings, the minimum net clear opening size shall comply with Sections 1031.3 through 1031.5. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Such bars, grilles, or grates shall weigh no more than 30 pounds (13.6 kg). Where such bars, grilles, grates or similar devices are installed in existing buildings, smoke alarms shall be installed in accordance with Section 907.2.11 regardless of the valuation of the alteration.

Chapter 11 is hereby repealed in its entirety.

Subsection 3307.1 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**3307.1 Required access:** *Approved* vehicle access for firefighting shall be provided to all construction or demolitions sites. Vehicle access shall be provided to within ~~400 feet (30 480 mm)~~ 50 feet (15,240 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.



**3307.1.1 Temporary fire apparatus access specification.** Temporary fire apparatus access roads shall be installed and arranged according to Sections 3307.1.2 through 3307.1.5.

**3307.1.2 Dimensions.** Temporary fire apparatus access roads shall have an unobstructed width or not less than 20 feet (6096 mm) and a vertical clear of not less than 13 feet 6 inches (4114.8 mm).

**3307.1.3 Surface.** Temporary fire apparatus access roads shall have surface consisting of asphalt, angular rock or class 6 road base. The surface shall be capable of supporting the imposed load or fire apparatus weighing 80,000 pounds (36,287.39 kg) and drivable under all weather conditions.

**3307.1.4 Dead Ends.** Dead-end temporary fire apparatus access roads in excess of 150 feet (45,720 mm) in length shall be provided with an approved area for fire apparatus turnaround.

**3307.1.5 Vehicle access.** Vehicle access shall be maintained until permanent access roads are available and approved.

Subsection 5307.3 is hereby amended by the addition of the words double-underlined to read as follows:

**5307.3 Insulated liquid carbon dioxide systems used in beverage dispensing applications.** Insulation liquid carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Sections 5307.3.1. Carbon dioxide systems installed prior to the effective date of the ordinance adopting this code shall comply with Section 5307.3.1. Owners shall be permitted one year from the date of discovery of an existing carbon dioxide system to bring the existing carbon dioxide system into compliance with Section 5307.3.1.

Subsection 5504.3.1.1.3 is hereby amended by the addition of the words double-underlined to read as follows:

**5504.3.1.1.3 Location.** Containers of *cryogenic fluids* shall not be located within diked areas containing other hazardous materials. Storage of flammable *cryogenic fluids* in stationary containers outside of buildings is prohibited for Group R occupancies within the territorial limits of the City of Thornton, except as permitted by specific use permit, as approved by the fire code official or as permitted by any other ordinance of the Thornton City Code.

Subsection 5601.1.3 is hereby repealed and reenacted to read as follows:

**5601.1.3 Fireworks.** The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Any person who pleads guilty or is found guilty of a first violation shall be subject to a minimum mandatory fine in the amount of \$500.00. Any person who pleads guilty or is found guilty of a second or subsequent violation within a 12-month period shall be subject to a minimum mandatory fine in the amount of \$1000.00.

**Exceptions:**

1. The use of fireworks for display as permitted in Section 5608. Fireworks displays are allowed in the City of Thornton only for government-sponsored or co-sponsored events. The terms "*government-sponsored*" or "*co-sponsored*" shall mean sponsored or co-sponsored by the state or a political subdivision of the state or the federal government or agency thereof.
2. The sale, possession, and use of Novelty devices specifically identified as Party Poppers and Snappers, provided the device meets the requirements identified in the American Pyrotechnics Association ("APA") Standard 87-1 currently or as amended, including Sections 2.12 Novelty, 3.2 Novelties, 3.2.1 Party Poppers, and 3.2.2 Snapper. The devices shall be clearly marked and labeled to meet the requirements of the Consumers Product Safety Commission and APA Standard 87-1 as applicable to consumer fireworks devices, and must be packaged in strong outer packaging that is sealed to prevent leakage of the contents.

*Subsection 5704.2.9.6.1* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**5704.2.9.6.1 Locations where above-ground tanks are prohibited.** Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited ~~within the limits established by law as set forth in the fire code adoption ordinance or other regulation adopted by the jurisdiction for Group R occupancies within the territorial limits of the City of Thornton, except as permitted by specific use permit, as approved by the fire code official or as permitted by any other ordinance of the Thornton City Code.~~

A new *subsection 5704.2.9.6.4* is hereby enacted to read as follows:

**5704.2.9.6.4 Construction.** When the storage of Class I and II liquids in above-ground tanks outside of buildings is permitted, tanks shall be designed and installed in accordance with the requirements for protected above-ground tanks.

**Exception:** Alternate types of above-ground tanks may be approved by the *fire code official* based on other fire protection features or increased distances from property lines, public ways, buildings, and other tanks.

Subsection 5706.2.4.4 is hereby repealed in its entirety.

Subsection 5706.3.1.3 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**5706.3.1.3 Buildings.** Wells shall not be drilled within ~~100 feet (30,480 mm)~~  
350 feet (106,680 mm) of buildings not necessary to the operation of the well.

Subsection 5706.3.1.3.1 is hereby repealed in its entirety.

Subsection 5706.3.1.3.2 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**5706.3.1.3.2 Existing wells.** Where wells are existing, buildings shall not be constructed within ~~the distances set forth in Section 5706.3.1 for separation of wells or buildings 200 feet ( 60,960 mm) of wells.~~

**5706.3.1.3.2.1 Plugged and abandoned wells.** Buildings shall be constructed at a distance from a plugged and abandoned well that satisfies Thornton City Code Section 18-583.

Subsection 5706.3.5 is hereby amended by the addition of the words double-underlined to read as follows:

**5706.3.5 Storage Tanks.** Storage of *flammable* or *combustible liquids* in tanks shall be in accordance with Section 5704. except that production tanks and associated on-site production equipment shall be located at least 350 feet (106,680 mm) from any building not necessary to the operation of the well and at least 500 feet (152,400 mm) from a building with an occupancy of Group A, E or I.

When production tanks and associated on-site production equipment are existing, main buildings shall not be constructed within the distances set forth in this section for separation of production tanks and associated on-site production equipment. Oil storage tanks or groups of tanks shall have posted in a conspicuous place, on or near such tank or tanks, an *approved* sign with the name of the *owner* or operator, or the lease number and the telephone number where a responsible person can be reached at any time.

Subsection 5806.2 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

**5806.2 Limitations.** Storage of flammable *cryogenic fluids* in stationary containers outside of buildings is prohibited ~~within the limits established by law as set forth in the fire code adoption ordinance or other regulation adopted by the jurisdiction for Group R occupancies within the territorial limits of the City of Thornton, except as permitted by specific use permit, as approved by the fire code official or as permitted by any other ordinance of the Thornton City Code.~~

*Subsection 6104.2* is hereby repealed and reenacted to read as follows:

**6104.2 Maximum capacity within established limits.** The storage of liquefied petroleum gas is prohibited for Group R occupancies within the territorial limits of the City of Thornton, except as permitted by specific use permit, as approved by the *fire code official* or as permitted by any other ordinance of the Thornton City Code.

**Exception:** When public utilities are not available for use as a fuel source. At such time as utilities do become available, as determined by the City, this exemption will not apply. Once the exemption no longer applies, *owners* shall be permitted one year, from the date on which the exemption no longer applies, to remove the liquefied petroleum gas from their property, except as permitted by specific use permit, as approved by the *fire code official* or as permitted by any other ordinance of the Thornton City Code.

A new *subsection 6104.2.1* is hereby enacted to read as follows:

**6104.2.1 LP-gas containers for standby home generators.** When the storage of LP-gas containers is permitted for use with standby home generators, the capacity of individual LP-gas containers shall not exceed 100 pounds (45.4 kg) or a water capacity of 24 gallons (90.84 L). The aggregate capacity of LP-gas for any one standby home generator shall not exceed 200 pounds (90.8 kg) or a water capacity of 48 gallons (181.68 L). The LP-gas containers shall comply with all applicable International Fire Code and NFPA 58 requirements.

## **APPENDIX B, Fire-Flow Requirements for Buildings.**

*Table B105.1(1)* is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

Table B105.1(1)

### Required Fire-Flow for One- and Two-Family Dwellings, Group R-3 and R-4 Buildings and Townhouses

FIRE-FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
0-3,600	No automatic sprinkler system	1,000	1
3,601 and greater	No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2) at the required fire-flow rate
0-3,600	Section 903.3.1.3 of the <i>International Fire Code</i> or Section P2904 of the <i>International Residential Code</i>	<del>500</del> <u>750</u>	1/2
3,601 and greater	Section 903.3.1.3 of the <i>International Fire Code</i> or Section P2904 of the <i>International Residential Code</i>	<del>1/2-3/4</del> value in Table B105.1(2)	1

For SI: 1 square foot = 0.0929 m<sup>2</sup>, 1 gallon per minute = 3.785 L/m.

Table B105.2 is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

### Table B105.2 Required Fire-Flow for Buildings Other Than One- and Two-Family Dwellings, Group R-3 and R-4 Buildings and Townhouses

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the <i>International Fire Code</i>	<del>25-50</del> % of the value in Table B105.1(2) <sup>a</sup>	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the <i>International Fire Code</i>	<del>25-75</del> % of the value in Table B105.1(2) <sup>b</sup>	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m.

a. The reduced fire-flow shall be not less than ~~1,000-1,500~~ gallons per minute (5,678 liters per minute).

b. The reduced fire-flow shall be not less than 1,500 gallons per minute (5,678 liters per minute).

### APPENDIX C, Fire Hydrant Locations and Distribution.

Table C102.1, footnote c is hereby amended by the addition of the words double-underlined and the deletion of the words stricken to read as follows:

- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed ~~1,000-1,200~~ feet (365.76 meters) to provide for transportation hazards.

Table C102.1, footnotes f and g are hereby repealed in their entirety.

## RESOLUTION

A RESOLUTION RECOMMENDING ADOPTION OF AN ORDINANCE REPEALING AND REENACTING CERTAIN SECTIONS OF CHAPTER 10, ARTICLE IV OF THE THORNTON CITY CODE TO ADOPT BY REFERENCE THE 2023 NATIONAL ELECTRICAL CODE, AND THE 2024 EDITIONS OF THE INTERNATIONAL BUILDING CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL RESIDENTIAL CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL EXISTING BUILDING CODE, INTERNATIONAL SWIMMING POOL AND SPA CODE AND INTERNATIONAL FIRE CODE, WITH LOCAL AMENDMENTS THERETO.

WHEREAS, pursuant to Section 10-34(g) of the Thornton City Code, the Building Code Advisory Board (BCAB) has the authority to hold public hearings regarding adoption of fire and building codes and make formal recommendations to the City Council for such adoption; and

WHEREAS, in 2022, the City adopted the 2021 editions of the above-referenced international codes and the 2020 National Electrical Code; and

WHEREAS, the 2024 editions of the above-referenced international codes and the 2023 National Electrical Code represent national building, construction and fire safety standards that are updated and amended from time to time to conform to the changing need of the construction industry and changing fire protection methods; and

WHEREAS, BCAB considered presentations by the Building Inspection Division and Fire Prevention Division requesting adoption of the above-referenced codes and local amendments at a public hearing held on March 18, 2025; and

WHEREAS, after consideration of the Divisions' presentations and conducting the public hearing, BCAB concludes that adoption of the codes and amendments are in the best interests of the City and will serve to promote the public health, safety and welfare.

NOW, THEREFORE, BE IT RESOLVED BY THE BUILDING CODE ADVISORY BOARD OF THE CITY OF THORNTON, COLORADO, AS FOLLOWS:

The Building Code Advisory Board, having held a public hearing and considering adoption of the above referenced building and fire codes and amendments as presented, hereby recommends to the Thornton City Council the adoption of all said codes and amendments by ordinance.

ORDERED and signed \_\_\_\_\_, 2025.

CITY OF THORNTON, COLORADO

---

Chair, Building Code Advisory Board

Signature

ATTEST:

---

Recording Secretary Signature