

ARTICLE IV, TECHNICAL STANDARDS

DIVISION 1. GENERALLY.

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

The International Building Code, 2009 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, 2009 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 is adopted in full, including outline of contents and index, but excluding all appendix chapters, except Appendix I.

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

The International Building Code adopted in Section 10-151 is hereby amended with section numbers referring to section numbers of the International Building 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 *Building Code* of 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 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 Code*, *International Existing Building 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.

Chapter 1 Part 2-Administration and Enforcement is hereby repealed in its entirety. Please refer to Thornton City Code Chapter 10 Article II.

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

SLEEPING ROOM. An enclosed space meeting the minimum area requirements of the building code and containing a closet, or similar area which is readily convertible to a closet (such as a space that is sectioned off from a room in such a manner that it needs only doors and shelves to become a closet). Exception: A closet fitted with permanently affixed floor to ceiling shelving and contains no closet rod and no provision for a rod may be accepted as a storage closet serving a non-sleeping room.

Table 508.3.3 is hereby amended by the addition of a footnote double-underlined to read as follows:

Table 508.4

REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

OCCUPANCY	A ^d , E		I-1, I-3, I-4		I-2		R		F-2, S-2 ^b U		B, F-1, M, S-1		H-1		H-2		H-3, H-4, H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A ^d , E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3 ^a
I-1, I-3, I-4	-	-	N	N	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
I-2	-	-	-	-	N	N	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP
R	-	-	-	-	-	-	N	N	1 ^c	2 ^c	1	2	NP	NP	3	NP	2	NP
F-2, S-2 ^b , U	-	-	-	-	-	-	-	-	N	N	1	2	NP	NP	3	4	2	3 ^a
B, F-1, M, S-1	-	-	-	-	-	-	-	-	-	-	N ^g	N ^g	NP	NP	2	3	1	2 ^a
H-1	-	-	-	-	-	-	-	-	-	-	-	-	N	NP	NP	NP	NP	NP
H-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	NP	1	NP
H-3, H-4, H-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 ^{e, f}	NP

For SI: 1 square foot = 0.0929 m2.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.5.2.

b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but to not less than 1 hour.

c. See Section 406.1.4.

d. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

e. Separation is not required between occupancies of the same classification.

f. For H-5 occupancies, see Section 415.8.2.2.

g. All tenants or tenant spaces within a multiuse retail center shall have a minimum two-hour fire-resistance rated wall between occupancies, or a one-hour fire-resistance rated wall when the building is equipped with a fire sprinkler system throughout installed in accordance with Section 903.3.1.1; unless the provisions of Section 508.3 for non-separated occupancies are applied and the most restrictive occupancy group allowed is assumed

Subsection 908.7 is hereby added as a new subsection to read as follows:

908.7 Carbon monoxide alarms. For new construction of all dwelling units, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in *dwelling units* within which fuel-fired *appliances* are installed and in dwelling units that have attached garages.

908.7.1 Where required in existing dwellings. Where interior work requiring a *permit* occurs in existing *dwellings* that have attached garages or in existing dwellings within which fuel-fired *appliances* exist, carbon monoxide alarms shall be provided in accordance with Section 908.7.

908.7.2 *Alarm requirements.* Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. 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 1009.4.2, exception 6 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

Exceptions:

6. See the International Existing Building Code for the replacement of existing *stairways*.

Subsection 1013.1 is hereby amended by the addition of the words double-underlined to read as follows:

1013.1 Where required. Guards shall be located along open-sided walking surfaces, including window wells, *mezzanines*, *equipment platforms*, *stairs*, *ramps* and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. *Guards* shall be adequate in strength and attachment in accordance with Section 1607.7.

Exception: *Guards* are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
4. At vertical openings in the performance area of stages and platforms.
5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not accessible to the public.
7. In assembly seating where *guards* in accordance with Section 1028.14 are permitted and provided.

Subsections 1029.1, 1029.2, 1029.3, 1029.4, and 1029.5.1 are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

1029.1 General. In addition to the *means of egress* required by this chapter, provisions shall be made for emergency escape and rescue in Group R and I-1 occupancies.

Basements and sleeping rooms below the fourth *story above grade plane* shall have at least one exterior *emergency escape and rescue opening* in accordance with this section. Where basements contain one or more sleeping rooms, *emergency escape and rescue openings* 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. In other than Group R-3 occupancies, sleeping rooms provided with a door to a fire-resistance-rated *corridor* having access to two remote *exits* in opposite directions.
2. The *emergency escape and rescue opening* is permitted to open onto a balcony within an *atrium* in accordance with the requirements of Section 404, provided the balcony provides access to an *exit* and the dwelling unit or sleeping unit has a *means of egress* that is not open to the *atrium*.
3. *High-rise buildings* in accordance with Section 403.
4. *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 *exit* balcony that opens to a *public way*.
5. Basements without *habitable spaces* and having no more than 200 square feet (18.6m²) in floor area and having ceiling heights less than required in Section 1208.2 shall not be required to have emergency escape windows.

1029.2 Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m²).

1029.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

Exception: Buildings permitted prior to May 23, 1977 may have egress windows with a sill height of not more than 48 inches.

1029.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over *emergency escape and rescue openings* provided the minimum net clear opening size complies with Section 1029.2 and 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. 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*.

1029.5.1 Minimum size. The minimum horizontal area of the window well shall be 9 square feet (0.84m²), with a minimum dimension of 36 inches (914 mm). The area of the window well shall allow the *emergency escape and rescue opening* to be fully opened.

Exception: Buildings permitted prior to November 17, 1995 are not required to meet the window well provisions of this section unless an egress window is required or added.

Subsection 1103.2.2 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

1103.2.2 Existing buildings. Existing buildings shall comply with the International Existing Building Code.

Section 1207 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

1207.1 Scope. This section shall apply to common interior walls, partitions and floor/ceiling assemblies between adjacent dwelling units, between dwelling units and adjacent public areas such as halls, corridors, stairs or service areas and between dwelling units and Group A, B, E, F, H, I, M, R, S and U Occupancies.

1207.2 Air-borne sound. Walls, partitions and floor/ceiling assemblies separating dwelling units from each other, ~~or~~ from public or service areas and between dwelling units and Group A, B, E, F, H, I, M, R, S and U Occupancies shall have a sound transmission class (STC) of not less than 50 (45 if field tested) for air-borne noise when tested in accordance with ASTM E 90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to dwelling unit entrance doors; however, such doors shall be tight fitting to the frame and sill.

1207.2.1 Masonry. The sound transmission class of concrete masonry and clay masonry assemblies shall be calculated in accordance with TMS 0302 or determined through testing in accordance with ASTM 90

1207.3 Structure-borne sound. Floor/ceiling assemblies between dwelling units, ~~or~~ between a dwelling unit and a public or service area and between dwelling units and Group A, B, E, F, H, I, M, R, S and U Occupancies within the structure shall have an impact insulation class (IIC) rating of not less than 50 (45 if field tested) when tested in accordance with ASTM E 492.

A *New Section 1211* is hereby added to read as follows:

SECTION 1211 SECURITY

1211.1 General. The purpose of this section is to establish minimum standards to make dwelling units resistant to unlawful entry and applies to all dwelling units.

1211.2 Door Requirements. All main or front entry doors to dwelling units shall be of solid core construction or metal and shall be arranged so that the occupant has a view of

the area immediately outside the door without opening the door. Such view may be provided by a door viewer having a field of view of not less than 180 degrees.

1211.3 Strike plate installation. In wood frame construction an open space between trimmers and wood door jambs shall be solid shimmed by a single piece extending not less than 12 inches (305 mm) above and below the strike plate.

Strike plates shall be attached to wood with not less than four No. 8 by 3-inch (76 mm) screws, which have a minimum of ¾ inch (19 mm) penetration into the nearest stud. Strike plates when attached to metal shall be attached with not less than four No. 8 machine screws.

1211.4 Hinges. When hinges are exposed to the exterior, at least one of the three required hinges shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins not less than three 4 ½ inch (114 mm) steel butt hinges shall be symmetrically fastened to both the door and the frame with not less than four No.9 by ¾ inch (19 mm) wood screws or to metal with not less than four No. 8 machine screws.

In wood construction, an open space between trimmers and wood door jambs shall be solid shimmed extending not less than 6 inches (152 mm) above and below the hinge.

1211.5 Locking hardware. Single swinging doors and the active leaf of doors in pairs shall be equipped with an approved exterior key operating deadbolt.

Subsection 1507.2.5 is hereby amended by the addition of the words double underlined to read as follows:

1507.2.5 Asphalt shingles. Asphalt shingles shall comply with ASTM D 225 or ASTM D 3462. Asphalt shingles shall be approved and carry a manufacturers national wind warranty for the designated wind speed.

A new subsection 1601.2 and Table 1601.2 are hereby added to read as follows:

1601.2 Design criteria. The design and construction of all buildings shall be in accordance with the Climatic and Geographic Design Criteria Table 1601.2.

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA TABLE 1601.2

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed ² (mph)	Topographic effects		Weathering	Frost line depth	Termite					
30 psf	See footnote 2	NO	B	Severe	30 in ³	Slight to Mod	1 ⁰ F	NO	DE ¹	1500	45 ⁰ F

- 1. This information is available in the Development Engineering Division.
- 2. Wind speed design may be based on 90 mph 3 second gust or 80 mph sustained.
- 3. Design to be six inches below the Frost line depth.

Subsection 1608.1 General is hereby amended by the words stricken and the addition of the words underlined to read as follows:

1608.1 General. Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than 30 pounds per square foot (2.787 m²).

Subsection 1809.5 is hereby amended by the addition of the words double underlined to read as follows:

1809.5 Frost Protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending 6 inches (152 mm) below the frost line specified in Table 1601.2;

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

- f.* Drinking fountains are not required where only one toilet room is required.

Subsection 2902.2 is hereby amended by the addition of the words double-underlined to read as follows:

2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separated facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less.
4. Separate facilities shall not be required in Group B occupancies in which the maximum occupant load is 25 or less.

Chapter 34 of this Code is hereby repealed in its entirety.

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

The International Plumbing Code, 2009 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, 2009 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, 2009 edition, is adopted in full including the outline of contents and the index, but excluding all appendix chapters with the exception of Appendix E.

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, to read as follows:

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

101.1 Title. These regulations shall be known as the *Plumbing Code* of the City of Thornton, hereinafter referred to as “this code.”

Subsections 103 through 109 are hereby repealed in their entirety. Please refer to Thornton City Code Chapter 10 Article II.

Subsection 305.6 is hereby amended by the deletion of the words stricken and the addition of the words double underlined to read as follows:

305.6 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 temperature unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed not less than 48 inches (1219 mm) below finish grade.

305.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (305 mm) below finished *grade* at the point of septic tank connection. Building sewers shall be a minimum of 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 312.9 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 the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or 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 is hereby amended by the deletion of the words stricken and the addition of the words double underlined to read as follows:

- 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 the *International Building Code*.

- b. Toilet facilities for employees shall be separate from facilities for inmates or patients.
- 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 where such room is provided with direct access from each patient sleeping unit and with provisions for privacy.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. The minimum number of required drinking fountains shall comply with Table 403.1 and Chapter 11 of the *International Building Code*.
- f. Drinking fountains are not required for an occupant load of 50 or fewer in a Mercantile Occupancy or 25 or fewer in a Business Occupancy.

Subsection 403.2 is hereby amended by the addition of the words double-underlined to read as follows:

403.2 *Separate facilities.* Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.
3. Separate facilities shall not be required in mercantile *occupancies* in which the maximum occupant load is 50 or less.
4. Separate facilities shall not be required in Group B occupancies in which the maximum occupant load is 25 or less.

Subsection 413.1 is hereby amended by the addition of the words double-underlined to read as follows:

413.1 *Approval.* Domestic food waste grinders shall be installed under the kitchen sink in all dwelling units and manufactured homes and shall conform to ASSE 1008. Commercial food waste grinders shall conform to ASSE 1009. Food waste grinders shall not increase the *drainage fixture unit* load on the sanitary drainage system.

Subsection 417.2 is hereby amended by the addition of the words double-underlined to read as follows:

417.2 *Water supply riser.* Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure. The attachment to the structure shall be made by the use of support devices designed for use with the specific piping material or by fittings anchored with screws. The rough-in height shall be not less than 75 inches (1,905 mm) above the shower or tub drain.

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. Maximum static pressure shall be 80 psi (551 kPa), an *approved* water-pressure reducing valve conforming to ASSE 1003 with strainer shall be installed to reduce the pressure in the building water distribution piping to 80 psi (552 kPa) static or less.

Exception: Service lines to sill cocks and outside hydrants, and main supply risers where pressure from the mains is reduced to 80 psi (552 kPa) or less at individual fixtures.

Subsection 706.3 is hereby amended by the deletion of the words stricken to read as follows:

706.3 Installation of fittings. Fittings shall be installed to guide sewage and waste in the direction of flow. Change in direction shall be made by fittings installed in accordance with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on the pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of back-to-back water closets and fixtures or appliances with pumping action discharge.

Subsection 708.3.3 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

708.3.3 Changes of direction. Cleanouts shall be installed at each change of direction greater than 135 degrees (2.36 rad) in the building sewer, building drain and horizontal waste or soil lines. Where more than one change of direction occurs in a run of piping, only one cleanout shall be required for each 40 feet (12 192 mm) of developed length of the drainage piping.

Table 709.1 is hereby amended by the deletion of the words stricken and the addition of the words double underlined to read as follows:

**TABLE 709.1
DRAINAGE FIXTURE UNITS FOR FIXTURES AND GROUPS**

FIXTURE TYPE	DRAINAGE FIXTURE UNIT VALUE AS LOAD FACTORS	MINIMUM SIZE OF TRAP (inches)
Automatic clothes washers commercial ^{a g}	3	2
Automatic clothes washers residential	2	2
Bathroom group as defined in Section 202 (1.6 gpf water closet) ^f	5	—
Bathroom group as defined in Section 202 (water closet flushing greater than 1.6 gpf) ^f	6	—
Bathtub (with or without overhead shower or whirlpool attachments)	2	1 1/2
Bidet	1	1 1/4
Combination sink and tray	2	1 1/2
Dental lavatory	1	1 1/4

Dental unit or cuspidor	1	11/4
Dishwashing machine c domestic	2	11/2
Drinking fountain	1/2	11/4
Emergency floor drain	0	2
Floor drains ^h	2 ^h	2
Floor sinks	Note h	2
Kitchen sink domestic	2	11/2
Kitchen sink domestic with food waste grinder and/or dishwasher	2	11/2
Laundry tray (1 or 2 compartments)	2	11/2
Lavatory	1	11/4
Shower (based on the total flow rate through showerheads and body sprays)		
Flow rate:		
5.7 gpm or less	2	2
Greater than 5.7 gpm to 12.3 gpm	3	2
Greater than 12.3 gpm to 25.8 gpm	5	3
Greater than 25.8 gpm to 55.6 gpm	6	4
Service sink	2	11/2
Sink	2	11/2
Urinal	4	Note d
Urinal 1 gallon per flush or less	2 ^e	Note d
Urinal non-water supplied	1/2	Note d
Wash sink (circular or multiple) each set of faucets	2	11/2
Water closet flushometer tank public or private	4 ^e	Note d
Water closet private (1.6 gpf)	3 ^e	Note d
Water closet private (flushing greater than 1.6 gpf)	4 ^e	Note d
Water closet public (1.6 gpf)	4 ^e	Note d
Water closet public (flushing greater than 1.6 gpf)	6 ^e	Note d

Subsection 1101.3 is hereby amended by the addition of the words double-underlined to read as follows:

1101.3 Prohibited drainage. Storm water shall not be drained into sewers intended for sewage only. Storm water shall not discharge directly over exit doors or across sidewalks and walkways. Roof areas shall not shed onto exit doors or parking areas.

Subsection E103.1 of Appendix E is hereby amended by the addition of the words double-underlined to read as follows:

E103.1 General. Decide from Table 604.3 what is the desirable minimum residual pressure that should be maintained at the highest fixture in the supply system. If the highest group of fixtures contains flush valves, the pressure for the group should not be less than 15 pounds per square inch (psi) (103.4 kPa) flowing. For flush tank supplies, the available pressure should not be less than 8 psi (55.2 kPa) flowing, except blowout action fixtures must not be less than 25 psi (172.4 kPa) flowing. Velocities within the piping supply system shall not exceed 10 feet per second (fps) (or as specified by the Manufacturer, whichever is least) except by prior approval of the Building Official. Meter

sizing shall be by the "City of Thornton Standards and Specifications for the Design and Construction of Public Improvements".

Subsection E201 and Table E201.1 are hereby repealed in their entirety.

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

The International Mechanical Code, 2009 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, 2009 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

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

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

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

101.1 Title. These regulations shall be known as the *Mechanical Code* of the City of Thornton, hereinafter referred to as "this code."

Subsections 103 through 109 are hereby repealed in their entirety. Please refer to Thornton City Code Chapter 10 Article II.

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

The International Fuel Gas Code, 2009 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, 2009 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

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

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

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

101.1 Title. These regulations shall be known as the *Fuel Gas Code* of the City of Thornton, hereinafter referred to as "this code."

Subsection [EB] 102.2.1 is hereby amended by the deletion of the words stricken and addition of the words double underlined to read as follows:

[EB] 102.2.1 Existing buildings. Additions, alterations, renovations or repairs related to building or structural issues shall be regulated by the *International Existing Building Code*.

Subsections 103 through 109 are hereby repealed in their entirety. Please refer to Thornton City Code Chapter 10 Article II.

Subsection 404.10 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

404.10 Minimum burial depth. Underground *pipng systems* shall be installed a minimum depth of 12 inches (305 mm) below grade. Underground plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

Subsection 404.10.1 is hereby repealed in its entirety.

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 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 for 30 minutes.

Subsection 406.4.2 is hereby repealed in its entirety.

Sec. 10-159. Uniform Code for the Abatement of Dangerous Buildings adopted by reference.

The Uniform Code for the Abatement of Dangerous Buildings, 1997 edition, copyright 1997 by the International Conference of Building Officials, is adopted by reference thereto and incorporated into this Code as the Dangerous Building Code of the City. The purpose and subject matter of the Uniform Code for the Abatement of Dangerous Buildings includes the provision of just, equitable and practicable procedures for the classification and abatement of dangerous buildings. Except as otherwise provided in this Code, the Uniform Code for the Abatement of Dangerous Buildings, 1997 edition, is adopted in full, including the outline of contents and index contained therein.

Sec. 10-159.1. Amendments to Uniform Code for the Abatement of Dangerous Buildings.

The Uniform Code for the Abatement of Dangerous Buildings adopted by Section 10-159 is amended with section numbers referring to section numbers of the Uniform Code for the Abatement of Dangerous Buildings, to read as follows:

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

SECTION 103 - ALTERATIONS, ADDITIONS AND REPAIRS All buildings or structures which are required to be repaired under the provisions of this code shall be subject to

the provisions of the *International Existing Building Code* as adopted by the City of Thornton.

Section 301, is hereby amended by the enactment of the words to be inter-delineated alphabetically as follows:

BOARD OF APPEALS means the same as Building Code Advisory Board as used in this chapter and defined in City Code, and the two phrases shall be used interchangeably.

Section 301, *BUILDING CODE* is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

BUILDING CODE means Chapter 10 of the Code referred to as the Building Code of the City of Thornton and all primary and secondary Codes adopted by reference.

Section 302, *Items No. 15 and 16*, are hereby amended to read as follows:

15. Whenever any building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, contamination, faulty construction or arrangement, inadequate light, air or sanitation facilities, or otherwise, is determined by the Building Official to be unsanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.
16. Whenever any building or structure, because of obsolescence, dilapidated condition, deterioration, damage, inadequate exits, lack of sufficient fire-resistive construction, faulty electric wiring, gas connections or heating apparatus, or other cause, is determined by the Building Official to be a fire hazard.

Section 401.1 is hereby amended to read as follows:

401.1 Commencement of Proceedings. When the Building Official has inspected or caused to be inspected any building and has found and determined that such building is a dangerous building, the Building Official shall commence proceedings to abate by the repair, rehabilitation, remediation, demolition and/or vacation of the building.

Section 401.2 Subsection 3, 3.1 is hereby amended to read as follows:

3.1 If the Building Official has determined that the building or structure must be repaired, rehabilitated or remediated, the order shall require that any required permits be secured therefor and the work physically commenced within such time (not to exceed 60 days from the date of the order) and completed within such time as the Building Official shall determine is reasonable under all of the circumstances.

Section 401.2 Subsection 3, 3.3 is hereby amended to read as follows:

3.3 If the Building Official has determined that the building or structure must be demolished, the order shall require that the building be vacated within such time as the Building Official shall determine is reasonable (not to exceed 30 days from the date of the order); that all required permits be secured therefor within 15 days from the date of

the order; and that the demolition be completed within such time as the Building Official shall determine is reasonable.

Section 401.2 Subsection 4 is hereby amended to read as follows:

4. Statements advising that if any required repair, rehabilitation, remediation, or demolition work (without vacation also being required) is not commenced within the time specified, the Building Official (i) will order the building vacated and posted to prevent further occupancy until the work is completed, and (ii) may proceed to cause the work to be done and charge the costs thereof against the building or its owner.

Section 401.2 Subsection 5 is hereby amended to read as follows:

5. Statements advising (i) that any person having any record title or legal interest in the building may appeal from the notice and order or any action of the Building Official to the Board of Appeals, provided the appeal is made in writing as provided in this Code and filed with the Building Official within 15 days from the date of service of such notice and order; and (ii) that failure to appeal will constitute a waiver of all right to an administrative hearing and determination of the matter.

Section 401.4 is hereby amended to read as follows:

401.4 Method of Service. Service of the notice and order shall be made upon all persons entitled thereto either personally or by mailing a copy of such notice and order by certified mail, postage prepaid, return receipt requested, to each such person at their address as it appears on the last equalized assessment roll of the county or as known to the building official. If no address of any such person so appears or is known to the Building Official, then a copy of the notice and order shall be so mailed, addressed to such person, at the address of the building involved in the proceedings. The failure of any such person to receive such notice shall not affect the validity of any proceedings taken under this section. Service by certified mail in the manner herein provided shall be effective on the date of mailing, for all persons entitled thereto, and the date the building is posted for all action against the building.

Subsection 403(1) is hereby amended to read as follows:

The following standards shall be followed by the Building Official (and by the Board of Appeals if an appeal is taken) in ordering the repair, rehabilitation, remediation, vacation or demolition of any dangerous building or structure:

1. Any building declared a dangerous building under this code shall be made to comply with one of the following:
 - 1.1 The building shall be repaired, rehabilitated or remediated in accordance with the current building code, health regulations or standards, or other current code applicable to the type of substandard conditions requiring repair, rehabilitation or remediation; or
 - 1.2 The building shall be demolished at the option of the building owner; or

- 1.3 If the building does not constitute an immediate danger to the life, limb, building or safety of the public it may be vacated, secured and maintained against entry.

Subsection 404.2 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

Section 404.2 Compliance. Whenever such notice is posted, the Building Official shall include a notification thereof in the notice and order issued under Section 401.2, reciting the emergency and specifying the conditions which necessitate the posting. No person shall remain in or enter any building which has been so posted, except that entry may be made to repair, demolish or remove such building under permit. No person shall remove or deface any such notice after it is posted until the required repairs, demolition or removal have been completed and a letter of compliance_ issued pursuant to the provisions of the Building Code.

Subsection 701.1 is hereby amended to read as follows:

701.1 General. After any notice and order of the building official becomes effective or the board of appeals made pursuant to this code shall have become final, it shall be unlawful for any such person to whom any such notice and order is directed to fail, neglect or refuse to obey any such notice and order.

1. Any such person who fails to comply with any such order is guilty of a municipal ordinance offense.
2. Each day that the building remains in violation of the notice and order and the person to whom such notice and order is directed fails to obey such notice and order shall constitute a separate and distinct violation.
3. Any person who pleads guilty or no contest to or who, after trial, is found guilty of violating this Section 701.1 shall be penalized as provided in Section 1-8(b) of the Thornton City Code.

Subsection 701.2 is hereby amended to read as follows:

702.2 Failure to Obey Order. If, after any order of the Building Official becomes effective or Board of Appeals made pursuant to this code has become final, the person to whom such order is directed shall fail, neglect or refuse to obey such order, the Building Official may (i) cause such person to be prosecuted under Section 701.1 or (ii) institute any appropriate action to abate such building as a public nuisance.

Subsection 701.3,3 is hereby amended to read as follows:

3. The Building Official may, in addition to any other remedy herein provided, cause the building to be repaired, rehabilitated, and/or remediated to the extent necessary to correct the conditions which render the building dangerous as set forth in the notice and order; or, if the notice and order required demolition, to cause the building to be sold and demolished or demolished and the materials, rubble and debris therefrom removed and the lot cleaned. Any such repair,

rehabilitation, remediation, or demolition work shall be accomplished and the cost thereof, including all administrative costs of the City, paid and recovered in the manner hereinafter provided in this code. Any surplus realized from the sale of any such building, or from the demolition thereof, over and above the cost of demolition and of cleaning the lot, shall be paid over to the person or persons lawfully entitled thereto.

Sections 801.1 and 801.2 are hereby amended, and a new *Section 801.3* is hereby enacted to read as follows:

801.1 Procedure. When any work, construction, rehabilitation, remediation, repair, or demolition is to be done pursuant to Section 701.3, Item 3, of this Code, the work shall be accomplished by private contract upon the direction of the Building Official. Plans and specifications therefor may be prepared by the contractor, or the Building Official may employ such architectural and engineering assistance on a contract basis as deemed reasonably necessary. If any part of the work is to be accomplished by private contract, standard contractual procedures shall be followed to choose the contractor. If the work to be performed is related to remediation or rehabilitation of a contaminated building, cleanup shall meet State of Colorado and Tri-County Health standards and regulations.

801.2 Costs. The cost of such work and all administrative costs of the City may be paid by a special assessment against the building involved, but also shall be a personal obligation of the building owner. Such special assessment shall become and constitute a continuing and perpetual lien and charge upon the lot(s) or parcel(s) of ground upon which they are levied and such lien shall have a priority over all other liens except general taxes.

801.3 Special Assessments.

801.3.1 Collection of Special Assessments. Collection of the special assessments, referred to in Subsection 801.2, may be collected following the procedures set forth in Subsection 801.3.2 herein. The procedures for collections of special assessments in this subsection, if followed, are in lieu of Sections 901 through 907 of Chapter 9.

801.3.2 Collection of Special Assessment Procedure.

1. A notice of special assessment, including the right to a hearing, as set out in Subsections 801.3.2(5) and (6) of this section, shall be sent first class mail, from the City's Finance Director to the property owner/lessee at the address listed for the property owner in the county record and the property address. If any notice is returned, the property shall be posted with such notice.
2. The property owner/lessee has 30 days from the date the notice of special assessment is mailed or if notice is returned, from the date the property is posted to pay the assessment. Failure to pay within the time allotted will cause the special assessment to be recorded against the property. The special assessment will constitute a continuing lien against such property.

3. The amount of the assessment will include, in addition to all contractors' charges, inspection costs, attorneys' fees, court costs, and all other associated costs. The assessment may be paid any time prior to the assessment being turned over to the County Treasurer. Payments must be made directly to the City's Finance Director.
4. Unpaid assessments will be filed quarterly with the proper office of the County Clerk and Recorder's office and annually with the Treasury office.
5. An owner/lessee may object to such assessment within 30 days from the date the notice of assessment was mailed or if the notice is returned, from the date the property is posted. The objection must be in writing and mailed to and received by the Building Official within the 30-day period. The objection must include a phone number and address of the objecting party, and must state the basis for the objection and must be on forms made available for this purpose by the Building Inspection Division. Upon receipt of such objection and payment of the appropriate fee, the Building Official will notify the Chairperson of the Board of Appeals who will then set a hearing date, which hearing shall be within 15 business days from receipt of the objection. Notice of this date will be mailed to the person making the objection. Failure to include an address in the objection will constitute a waiver of the right to file an objection.
6. The owner/lessee who requests the hearing will be charged an administrative fee pursuant to Section 10-35(e) of the Thornton City Code pertaining to hearings before the Board of Appeals. Failure of such person to attend the hearing at the date and time scheduled shall constitute a waiver of such right to a hearing and a determination of all issues regarding the assessment.
7. The Board of Appeals shall conduct the hearing in an informal manner and shall not be bound by technical rules of evidence. The Building Official shall carry the burden of establishing that a violation existed and that costs for abatement represented in the special assessment were reasonable under the facts and circumstances of the particular case. The standard of proof shall be by a preponderance of the evidence. A written decision will be prepared at the end of the hearing. This decision will be reached after both the landowner and the Building Official have presented their cases. The decision will be deemed effective three days from the date the decision is mailed to the owner/lessee and will be a final decision.

Section 802.1 is hereby amended to read as follows:

802.1 General. The legislative body of this jurisdiction may establish a special revolving fund to be designated as the repair, rehabilitation, remediation, and demolition fund. Payments shall be made out of said fund upon the demand of the Building Official to defray the costs and expenses which may be incurred by this jurisdiction in doing or causing to be done the necessary work of repair or demolition of dangerous buildings.

Sections 908.1 and 909 are hereby amended to read as follows:

908.1 Priority. Immediately upon a special assessment being turned over to the County Treasurer, the assessment shall be deemed to be complete, the several amounts assessed shall be payable, and the assessments shall be liens against the lots or parcels of land assessed, respectively. The liens shall be subordinate to all existing special assessment liens previously imposed upon the same property and shall be paramount to all other liens except for state, county and property taxes with which it shall be upon a parity. The lien shall continue until the assessment and all interest due and payable thereon are paid.

Section 909 is hereby amended to read as follows:

Section 909 --REPORT TO ASSESSOR AND TAX COLLECTOR: ADDITION OF ASSESSMENT TO TAX BILL. Certified copies of the special assessment shall be given to the County assessor and/or the tax collector for this jurisdiction, who shall add the amount of the assessment to the next regular tax bill levied against the parcel.

(Ord. No. 2452, § 8, 5-27-97; Ord. No. 2590, § 7, 12-13-99; Ord. No. 2663, § 1, 4-23-01; Ord. No. 2496, § 1(a.--j.), 5-9-06)

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

The National Electrical Code, 2008 edition, copyright 2007 by the National Fire Protection Association, is adopted by reference thereto and incorporated into this Code as the Electrical Code of the City. 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. Except as otherwise provided in Section 10-163, the National Electrical Code, 2008 edition, is adopted in full, including the outline of contents and index contained therein.

Sec. 10-163. Amendments to National Electrical Code.

The National Electrical Code adopted in Section 10-162 is amended with section numbers referring to section numbers of the National Electric Code, to read as follows:

Subsection 110.5 is hereby amended by the addition of the words double underlined to read as follows:

110.5 Conductors. Conductors normally used to carry current shall be of copper unless otherwise provided in this Code. Where the conductor material is not specified, the material and the sizes given in this Code shall apply to copper conductors. Where other materials are used , the size shall be changed accordingly. Aluminum conductors number 10 AWG or smaller are prohibited from use in the City of Thornton.

Article 250.50 is hereby amended by the addition of the words double underlined to read as follows:

250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in

250.52(A)(4) through (A)(8) shall be installed and used. Where a metal underground water pipe does not exist, there shall be provided two (2) electrodes of rods of iron or steel installed in accordance with Article 250.56.

Article 250.118 is hereby amended by the addition of the words double underlined to read as follows:

250.118 Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following except that items 2—14 may not be used as the equipment grounding conductor for panel feeders:

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

The International Residential Code, 2009 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, 2009 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters with the exception of Appendix G, Appendix H and Appendix K.

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

The International Residential Code adopted in Section 10-165 is amended with section numbers referring to section numbers of the International Residential Code, to read as follows:

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 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* 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.

Subsections R103 through R114 are hereby repealed in their entirety. Please refer to Thornton City Code Chapter 10 Article II.

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

Section R202 SLEEPING ROOM. An enclosed space meeting the minimum area requirements of the building code and containing a closet, or similar area which is readily convertible to a closet (such as a space that is sectioned off from a room in such a manner that it needs only doors and shelves to become a closet). Exception: A closet fitted with permanently affixed floor to ceiling shelving and contains no closet rod and no provision for a rod may be accepted as a storage closet serving a non-sleeping room.

Table R301.2(1) is hereby completed to read as follows

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	Topographic effects		Weathering	Frost line depth	Termite					
30 psf	See footnote 2	NO	B	Severe	30 in ³	Slight to Mod	1°F	NO	DE ¹	1500	45°F

1. This information is available in the Development Engineering Division.
2. Wind speed design may be based on 90 mph 3 second gust or 80 mph sustained
3. Design to be 6 inches(152 mm) below the Frost line depth per Section 403.1.4.1

Subsection R302.1 is hereby amended by the repeal and reenactment of Table R302.1 to read as follows:

TABLE R302.1 EXTERIOR WALLS

TABLE INSET:

EXTERIOR WALL ELEMENT		MINIMUM FIRE RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Wall	(Fire-resistance rated)	1 hour with exposure from both sides	0 feet
	(Not fire-resistance rated)	0 hours	5 feet ¹
Projections	(Fire-resistance rated)	1 hour on the underside	2 feet
	(Not fire-resistance rated)	0 hours	5 feet ²
Openings	Not allowed	N/A	<3 feet
	25% Maximum of Wall Area	0 hours	>3 feet and <5 feet
	Unlimited	0 hours	>5 feet
Penetrations	All	Comply with Section R317.3	<3 feet
		None required	>3 feet

N/A = Not applicable

1 Fire Separation distance of 3 feet can be used if the exterior wall cladding and trim is of non-combustible material. (Refer to Section R202 for definition of non-combustible).

2 Fire Separation distance of 3 feet can be used if the soffits cladding and fascia board is of non-combustible material. (Refer to Section R202 for definition of non-combustible).

Subsection R302.2 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

R302.2 Townhouses. Each *townhouse* shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception:

1. A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.
2. Where the townhouse is protected throughout with an automatic sprinkler system installed in accordance with Section 313.1 the common wall may be a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4

Subsection R302.5.1 is hereby amended by the addition of the words double-underlined to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with self-closing, self-latching solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

Subsections R305.1 and R305.1.1 are hereby repealed in their entirety and replaced with the following:

R305.1 Minimum height. Habitable space shall have a ceiling height of not less than 7 feet 6 inches (2286 mm) measured to the lowest projection from the ceiling except as otherwise permitted in this section. Hallways, bathrooms, toilet rooms, and laundry rooms shall have a ceiling height of not less than 7 feet (2134 mm) measured to the lowest projection from the ceiling. The required height shall be measured from the finish floor to the lowest projection from the ceiling. Any basement with a finished floor of

wood, concrete or other permanent material shall have a rough ceiling height of 7 feet (2134 mm) to beams, ducts and other obstructions spaced not less than 4 feet (1219 mm) on center and 7 feet 6 inches (2286 mm) elsewhere.

Exceptions:

1. Beams, girders and ductwork spaced not less than 4 feet (1,219 mm) on center may project not more than 6 inches (152 mm) below the required ceiling height.
2. For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet (2,134 mm) and no portion of the required floor area may have a ceiling height of less than 5 feet (1,524 mm).

Subsection R306.2 is hereby amended by the addition of the words double-underlined to read as follows:

R306.2 Kitchen. Each *dwelling* unit shall be provided with a kitchen area and every kitchen area shall be provided with a sink and garbage disposal.

Subsections R310.1, R310.1.1 and R310.4 are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

R310.1 Emergency escape and rescue required. Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where *basements* contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a *yard* or court that opens to a public way.

Exception:

1. *Basements* used only to house mechanical *equipment* and not exceeding total floor area of 200 square feet (18.58 m²) and having ceiling heights less than that required by Section 305.1.
2. Buildings permitted prior to May 23, 1977 may have egress windows with a sill height of not more than 48 inches (1219 mm).
3. Buildings permitted prior to November 17, 1995 are not required to meet the window well provisions of Section R310.2 unless an egress window is required or added.

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m²).

R310.4 Bars, grilles, covers and screens. Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening and shall weigh no more than 30 lbs (13.6 kg) .

Subsections R311.2 and R311.3 are hereby amended by the addition of the words double-underlined to read as follows:

R311.2 Egress door. At least one egress door shall be provided for each *dwelling* unit. The egress door and other exterior doors including the door from the dwelling to an attached garage shall be side-hinged, and shall provide a minimum clear width of 32 inches (813 mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 80 inches (2032 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the *dwelling* without the use of a key or special knowledge or effort.

Exception: Sliding glass doors located in an exterior wall may be less than 32 inches (813 mm) minimum clear width but must be a minimum of 80 inches (2032 mm) in height.

R311.3 Floors and landings at exterior doors. There shall be a landing or floor on each side of each exterior door. This shall include, if installed, a personnel door from the garage to the exterior. The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel. Exterior landings shall be permitted to have a slope not to exceed 1/4 unit vertical in 12 units horizontal (2-percent).

Exception: Exterior balconies less than 60 square feet (5.6 m²) and only accessible from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.

Subsections R312.1 is hereby amended by the addition of the words double-underlined to read as follows:

R312.1 Where required. Guards shall be located along open-sided walking surfaces, including window wells, stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.

Subsections R313.1 and 313.2 are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

R313.1 Townhouse automatic fire sprinkler systems. Effective January 1, 2013 an automatic residential fire sprinkler system shall be installed in *townhouses*.

Exception: An automatic residential fire sprinkler system shall not be required when *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904.

R313.2 One- and two-family dwellings automatic fire systems. Effective January 1, 2013, an automatic residential fire sprinkler system shall be installed in one- and two-family *dwellings*.

Exception: An automatic residential fire sprinkler system shall not be required for *additions* or *alterations* to existing buildings that are not already provided with an automatic residential sprinkler system.

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

Subsection R314.4 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

R314.4 Power source. In new construction, the required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

Exceptions:

1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs or additions regulated by Section R314.3.1
2. Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where the *alterations* or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an *attic*, crawl space or *basement* available which could provide access for hard wiring and interconnection without the removal of interior finishes.

Subsection R315.2 and R315.3 are hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

R315.2 Where required in existing dwellings. Where interior work requiring a *permit* occurs in existing *dwellings* that have attached garages or in existing dwellings within which fuel-fired *appliances* exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

R315.3 Alarm requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. 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.

Section R324 is hereby added to read as follows:

SECTION R324 SECURITY

R324.1 General. The purpose of this section is to establish minimum standards to make dwelling units resistant to unlawful entry and applies to all dwelling units.

R324.2 Door Requirements. All main or front entry doors to dwelling units shall be of solid core construction or metal and shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. Such view may be provided by a door viewer having a field of view of not less than 180 degrees.

R324.3 Strike plate installation. In wood frame construction an open space between trimmers and wood door jambs shall be solid shimmed by a single piece extending not less than 12 inches (305 mm) above and below the strike plate.

Strike plates shall be attached to wood with not less than four No. 8 by 3-inch (76 mm) screws, which have a minimum of $\frac{3}{4}$ inch (19 mm) penetration into the nearest stud. Strike plates when attached to metal shall be attached with not less than four No. 8 machine screws.

R324.4 Hinges. When hinges are exposed to the exterior, at least one of the three required hinges shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins. Not less than three $4\frac{1}{2}$ inch (114 mm) steel butt hinges shall be symmetrically fastened to both the door and the frame with not less than four No.9 by $\frac{3}{4}$ inch (19 mm) wood screws or to metal with not less than four No. 8 machine screws.

In wood construction, an open space between trimmers and wood door jambs shall be solid shimmed extending not less than 6 inches (152 mm) above and below the hinge.

R324.5 Locking hardware. Single swinging doors and the active leaf of doors in pairs shall be equipped with an approved exterior key operating deadbolt.

Section R325 is hereby added to read as follows:

SECTION R325 MANUFACTURED HOMES

R325.1 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. All manufactured home inspections shall be conducted by the Building Inspection Division.

R325.2 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.

R325.3 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.

R325.4 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.

R325.5 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 m²) 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.

R325.6 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.

R325.7 Carbon monoxide detectors. Carbon monoxide detectors shall be installed in accordance with the provisions of section R315 of this code.

R325.8 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 R325.3
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 in width nor less than six feet, two inches in height. 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 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 shall be considered as contributing to the minimum area required in this subsection.
- c. Habitable rooms shall be not less than seven feet in any horizontal dimension.

Subsection R403.1.4.1 is hereby amended by the addition of the words double-underlined, to read as follows:

R403.1.4.1 Frost Protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended 6 inches (152 mm) below the frost line specified in Table R301.2.(1);

Subsection R703.6.2.1 is hereby amended by the addition of the words double-underlined, to read as follows:

R703.6.2.1 Weep screeds. A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas, roof surfaces or other areas of transition; and shall be of a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.

Subsection R703.8 item 6 is hereby amended by the addition of the words double-underlined, to read as follows:

6. At wall and roof intersections. Siding, plaster, masonry and similar cladding materials shall be lapped over the flashing and installed a minimum of 2 inches (51 mm) above the surface of the roof.

Subsection R905.2.4 is hereby amended by the addition of the words double-underlined, to read as follows:

R905.2.4 Asphalt shingles. Asphalt shingles shall comply with ASTM D 225 or D 3462. Asphalt shingles shall be approved and carry a manufacturer's national wind warranty for the designated wind speed.

Subsection R905.2.8 is hereby amended by the addition of the words double-underlined, to read as follows:

R905.2.8.5 Drip edge. Drip edge shall be provided at eaves and gables of shingle roofs. Overlap shall be a minimum of 2 inches (51 mm). Eave drip edges shall extend ¼ inch (6.4 mm) below sheathing and extend back on the roof a minimum of 2 inches (51mm). Drip edge shall be mechanically fastened a maximum of 12 inches (305 mm) on center.

Subsection N1101 is hereby repealed and reenacted to read as follows:

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

Exception: Portions of the building envelope that do not enclose *conditioned space*.

N1101.2 Compliance. Compliance shall be demonstrated by meeting the requirements of the *International Energy Conservation Code*

Subsections N1102, N1103, and N1104 are hereby repealed in their entirety.

Subsection M1502.4.4.1 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

M1502.4.4.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1.

Subsection M1602.1 is hereby amended by the addition of the words double-underlined to read as follows:

M1602.1 Return air. Return air shall be provided from every level of the dwelling and shall be taken from inside the *dwelling*. Dilution of return air with outdoor air shall be permitted.

Subsection G2415.10 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

G2415.10 (404.10) Minimum burial depth. Underground *pipng systems* shall be installed a minimum depth of 12 inches (305 mm) below grade. Underground plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

Subsection G2415.10.1 (404.10.1) is hereby repealed in its entirety.

Subsection G2417.4.1 (406.4.1) is hereby repealed and reenacted to read as follows:

G2417.4.1 (406.4.1) Test pressure. The minimum test pressure for a low-pressure gas system shall be 20 pounds per square inch 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 for 30 minutes.

Subsection G2417.4.2 (406.4.2) is hereby repealed in its entirety.

Subsection P2603.6 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

P2603.6 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 shall be installed not less than 48 inches (1219 mm) below finish grade.

P2603.6.1 Sewer depth. Building sewers shall be a minimum of 12 inches (305 mm) below *grade*.

Subsection P2708.2 is hereby amended by the addition of the words double-underlined to read as follows:

P2708.2 Water supply riser. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure using support devices designed for use with the specific piping material or fittings anchored with screws. The rough-in height shall be not less than 75 inches (1,905 mm) above the shower or tub drain.

Subsection P2903.3.1 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

P2903.3.1 Maximum pressure. Maximum static pressure shall be 80 psi (551 kPa). An *approved* pressure-reducing valve conforming to ASSE 1003 shall be installed on all domestic water branch mains or risers at the connection to the water-service pipe.

Subsection P2904.1.1 is hereby amended by the addition of the words double-underlined to read as follows:

P2904.1.1 Required sprinkler locations. Sprinklers shall be installed to protect all areas of a *dwelling unit*.

Exceptions:

1. Attics, crawl spaces and normally unoccupied concealed spaces that do not contain fuel-fired appliances do not require sprinklers. In freeze protected *attics*, crawl spaces and normally unoccupied concealed spaces that contain fuel-fired equipment, a sprinkler shall be installed above the equipment; however, sprinklers shall not be required in the remainder of the space.

Subsection P3005.1.1 is hereby amended by the deletion of the words stricken to read as follows:

P3005.1.1 Horizontal to vertical (multiple connection fittings). Double fittings such as double sanitary tees and tee-wyes or *approved* multiple connection fittings and back-to-back fixture arrangements that connect two or more branches at the same level shall be permitted as long as directly opposing connections are the same size and the discharge

into directly opposing connections is from similar fixture types or fixture groups. Double sanitary tee patterns shall not receive the discharge of back-to-backwater closets and fixtures or appliances with pumping action discharge.

Table P3201.7 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

**TABLE P3201.7
SIZE OF TRAPS AND TRAP ARMS FOR PLUMBING FIXTURES**

PLUMBING FIXTURE	TRAP SIZE MINIMUM (inches)
Bathtub (with or without shower head and/or whirlpool attachments)	1 1/2
Bidet	1 1/4
Clothes washer standpipe	2
Dishwasher (on separate trap)	1 1/2
Floor drain	2
Kitchen sink (one or two traps, with or without dishwasher and garbage grinder)	1 1/2
Laundry tub (one or more compartments)	1 1/2
Lavatory	1 1/4
Shower (based on the total flow rate through showerheads and body sprays) Flow rate: 5.7 gpm and less More than 5.7 gpm up to 12.3 gpm More than 12.3 gpm up to 25.8 gpm More than 25.8 gpm up to 55.6 gpm	 2 2 3 4
Water closet	Note a

For SI: 1 inch = 25.4 mm.

a. Consult fixture standards for trap dimensions of specific bowls.

Subsection AG102.1 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

SWIMMING POOL. Any constructed or prefabricated structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

Exception:

1. Fishing ponds, casting pools, lakes, reservoirs and natural bodies of water used by the general public for recreation and sport.

2. Water fountains, display ponds or garden ponds less than 24 inches in depth

Subsection AG105.2 Item 1 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

1. The top of the barrier shall be at least 72 inches (1524 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool, hot tub or spa. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

Subsection AG105.2 Item 6 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

6. Maximum mesh size for chain link fences shall be a 11/4 inch (32mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 13/4 inches (44 mm).

Subsection AG105.5 is hereby amended to read as follows:

AG105.5 Barrier exceptions. Pools, spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

Subsection AK101.1 is hereby amended by the addition of the words double-underlined to read as follows:

AK101.1 General. Wall and floor-ceiling assemblies separating *dwelling units* including those separating adjacent *townhouse* units and separating dwelling units from Group A, B, E, F, H, I, M, R, S and U Occupancies shall provide air-borne sound insulation for walls, and both air-borne and impact sound insulation for floor-ceiling assemblies.

Sec. 10-166. ASME A17.1 Safety Code for Elevators and Escalators adopted by reference.

The ASME A17.1 Safety Code for Elevators and Escalators, 2007 edition, published by the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016., is hereby adopted by this reference and incorporated in this Code as the Elevator Code of the City. The purpose and subject matter of the ASME A17.1 Safety Code for Elevators and Escalators includes the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of elevators and escalators. Except as otherwise provided in this Code, the ASME A17.1 Safety Code for Elevators and Escalators, 2007 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

Sec. 10-168. ASME A17.3 Safety Code for Existing Elevators and Escalators adopted by reference.

The ASME A17.3 Safety Code for Existing Elevators and Escalators, 2005 edition, published by the American Society of Mechanical Engineers. Three Park Avenue, New York, New York 10016., is hereby adopted by this reference and incorporated in this Code as the Existing Elevator and Escalator Code of the City. The purpose and subject matter of the ASME A17.3 Safety Code for Existing Elevators and Escalators includes the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of existing elevators and escalators. Except as otherwise provided in this Code, the ASME A17.3 Safety Code for Existing Elevators and Escalators, 2005 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

Sec. 10-170. ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts adopted by reference.

The ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts, 2005 edition, published by the American Society of Mechanical Engineers. Three Park Avenue, New York, New York 10016., is hereby adopted by this reference and incorporated in this Code as the platform lift and stairway chairlift standard of the City. The purpose and subject matter of the ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts includes the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of platform lifts and stairway chairlifts. Except as otherwise provided in this Code, the ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts, 2005 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

Sec. 10-172. ASCE 21 Parts 1, 2, 3, 4 Automated People Mover Standards adopted by reference.

The ASCE 21 Parts 1, 2, 3, 4 Automated People Mover Standards, 2005 edition, published by the American Society of Civil Engineers. 1801 Alexander Bell Drive, Reston, Virginia 20191., is hereby adopted by this reference and incorporated in this Code as the People Mover Code of the City. The purpose and subject matter of the ASCE 21 Parts 1, 2, 3, 4 Automated People Mover Standards includes the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of Automated People Movers. Except as otherwise provided in this Code, the ASCE 21 Parts 1, 2, 3, 4 Automated People Mover Standards, 2005 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

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

The International Residential Code, 2009 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, 2009 edition, is adopted in full, including the outline of contents and the index, but excluding all appendix chapters.

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

The International Energy Conservation Code adopted in Section 10-175 is amended with section numbers referring to section numbers of the International Energy Conservation Code, to read as follows:

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

101.1 Title. This code shall be known as the *International Energy Conservation Code* of the City of Thornton, and shall be cited as such. It is referred to herein as “this code.”

Subsections 103 through 109 are hereby repealed in their entirety. Please refer to Thornton City Code Chapter 10 Article II.

Subsection 101.4.3 Exception 5 is hereby amended by the deletion of the words stricken and addition of the words double underlined to read as follows:

5. Reroofing for roofs where the insulation is not exposed. Roofs without insulation in the cavity and where the insulation is exposed during reroofing shall be insulated either above or below the sheathing.

Subsection 402.3.6 is hereby amended by the deletion of the words stricken and the addition of the words double-underlined to read as follows:

402.3.6 Replacement fenestration. When a permit is required and where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for *U-factor* and *SHGC* in Table 402.1.1.

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

The International Existing Building Code, 2009 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, 2009 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 10-177, the International Existing Building Code is adopted in full, including outline of contents and index, but excluding all appendix chapters. (Ord. No. 2993, § 15, 6-5-07, eff. 7-2-07)

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

The International Existing Building Code adopted in Section 10-177 is amended with section numbers refer to section numbers of the International Existing Building Code, to read as follows:

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:

101.1 Title. These regulations shall be known as the *Existing Building Code* the City of Thornton, hereinafter referred to as “this code.”

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

101.2 Scope. The provisions of the *International Existing Building 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 18-458.

Chapter 1 Part 2 Administration and Enforcement is hereby repealed in its entirety. Please refer to Thornton City Code Chapter 10 Article II.

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

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, partially collapsed, moved off its foundation or lacks the support of ground necessary to support it.
2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

Section 704.4.1 is hereby amended by the deletion of the words stricken.

704.4.1 Occupancy requirements. A fire alarm system shall be installed in accordance with Sections 704.4.1.1 through 704.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

Exceptions:

1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm-notification appliances shall be automatically activated in the areas selected.

704.4.1.1 Group E. A fire alarm system shall be installed in *work areas* of Group E occupancies as required by the *International Fire Code*.

704.4.1.2 Group I-1. A fire alarm system shall be installed in *work areas* of Group I-1 residential care/assisted living facilities as required by the *International Fire Code*.

704.4.1.3 Group I-2. A fire alarm system shall be installed in *work areas* of Group I-2 occupancies as required by the *International Fire Code*.

704.4.1.4 *Group I-3*. A fire alarm system shall be installed in *work areas* of Group I-3 occupancies as required by the *International Fire Code*.

704.4.1.5 *Group R-1*. A fire alarm system shall be installed in Group R-1 occupancies as required by the *International Fire Code*.

704.4.1.6 *Group R-2*. A fire alarm system shall be installed in *work areas* of Group R-2 apartment buildings as required by the *International Fire Code*.

704.4.1.7 *Group R-4*. A fire alarm system shall be installed in *work areas* of Group R-4 residential care/assisted living facilities as required by the *International Fire Code*.

Sec. 10-178. Violations and penalties; civil enforcement.

- (a) It shall be unlawful for any person to violate the provisions of this chapter or the terms of the codes or standards adopted and incorporated in this chapter. Whenever, in any section of this chapter or in any section of any rule or regulation of any code or standard adopted and incorporated in this chapter the doing of an act is required, prohibited, or declared to be unlawful, any person who shall be convicted of a violation thereof shall, for each offense, be punished as provided in Section 1-8(a) of the City Code. Each separate day during which any violation occurs or continues shall constitute a separate offense so punishable. A violation of any provision of this chapter, codes or standards incorporated in this chapter is declared to be a serious threat to public health and safety.
- (b) In addition to the penalties set forth in Subsection (a) of this section, the City Attorney is authorized to bring an action before any court of suitable jurisdiction to abate, remove, or enjoin such violation and to recover damages, costs, and reasonable attorney's fees incurred in the abatement and removal of such violation.

(Code 1975, § 44-62; Ord. No. 1530, 2-10-86; Ord. No. 1661, 5-11-87; Ord. No. 2033, § 1(bb), 12-17-90; Ord. No. 2281, § 19, 9-13-93; Ord. No. 2731, § 12, 10-8-02)