

- 1 (7) Section 202, General Definitions, Inserted:
2 [BG] ANIMAL HOUSING OR CARE FACILITY. A facility used for 24-hour occupancy or
3 permanent housing of animals for the purpose of providing a service, participating in a sport, or
4 for providing general board and care. Animal housing or care facilities include animal shelters,
5 animal breeding facilities, animal grooming facilities, animal daycare facilities, pet resorts,
6 animal hospitals/veterinary clinics, kennels, and pounds. Animal housing or care facilities do not
7 include animal or pet care by pet owners for their own animals at their owned or rented
8 residential property, and these facilities do not include Group U agricultural uses for the care
9 and feeding of the agricultural business owner's own livestock.
- 10 [BG] CONSTANT SUPERVISION FOR GROUP B ANIMAL HOUSING OR CARE FACILITY.
11 Twenty-four (24) hour on-site staff capable or responding to problems or emergencies that could
12 impact the safety or lives of the animals being housed or cared for.
- 13 (8) Section 202, General Definitions, Amended:
14 CARBON MONOXIDE SOURCE. A combustion process that has the potential to produce
15 carbon monoxide as a product of combustion under normal or abnormal conditions. Carbon
16 monoxide sources include, but are not limited to solid, liquid, or gas fueled appliances,
17 equipment, devices, or systems, such as fireplaces, furnaces, heaters, boilers, cooking
18 equipment, and vehicles with internal combustion engines.
- 19 (9) Section 203, Added and inserted after CARBON MONOXIDE SOURCE and before [BG] CARE
20 SUITE:
21 CARBON MONOXIDE SOURCE, DIRECT. A permanently installed carbon monoxide source
22 that is located in an interior space.
23 CARBON MONOXIDE SOURCE, FORCED-INDIRECT. A carbon monoxide source connected
24 to an interior space by a forced air supply duct.
- 25 (10) Section 202. General Definitions, Added and inserted after EGRESS COURT and before
26 ELECTROSTATIC FLUIDIZED BED:
27 ELECTRIC VEHICLE (EV). A vehicle using one or more electric motors for propulsion. For the
28 purpose of this specification, this will include both battery (BEV) and plug-in hybrid (PHEV)
29 electric vehicles.
30 ELECTRIC VEHICLE CHARGING STATION (EVCS), also referred to as ELECTRIC VEHICLE
31 SUPPLY EQUIPMENT (EVSE). All electrical and mechanical equipment, hardware, and
32 software installed by the contractor, electric wiring and/or cabling equipment infrastructure, the
33 contractor's signage, and all supporting equipment, including without limitation, concrete pads.
34 ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). Supplies electric energy used to recharge
35 electric vehicles.
- 36 (11) Section 202. General Definitions. Added and inserted between EMERGENCY SHUT OFF
37 VALVE, MANUAL and EMERGENCY VOICE/ALARM COMMUNICATIONS)
38 EMERGENCY SUMMONING DEVICES. Emergency summoning devices include, but are not
39 limited to, emergency poolside, fitness centers, and elevator emergency telephones or similar
40 devices.
- 41 (12) Section 202. General Definitions, OCCUPANCY CLASSIFICATION. Business Group B. Animal
42 hospitals, kennels and pounds, Amended to read: Animal housing or care facilities.
- 43 (13) Section 307.1.1 Amended to read: Prohibited open burning. Open burning shall be prohibited
44 when atmospheric conditions or local circumstances make such fires hazardous. Any open
45 burning not for the purpose of cooking requires a permit from the Fire Department.
- 46 (14) Section 307.4.2 Exception: Any recreational fire must be in a fire resistant container and must
47 not be used to burn household waste, yard debris, leaves, or processed lumber. Recreational
48 containers shall be contained in a metal or non-combustible container and shall not be greater

1 than 60 inches by 60 inches in width of length and shall not have sides less than 15 inches in
2 height. The burning fuel (wood) shall not be stacked above the edge of the container sides. The
3 overall flame shall not be over 4 feet in height from the ground or pit surface and shall be
4 constantly attended.

5
6 (15) Section 323. Added to read: Electric Charging Vehicle Areas.

7 (16) Section 323.1. Added to read: Outdoor Electric Vehicle Charging Stations (EVCS). Upon any
8 new or remodeled development, where provided, outdoor electric vehicle charging stations shall
9 comply with all of the following:

10 1. Installation shall be not less than 10 feet from any building or structure.

11 2. All charging equipment shall be located in accordance with the Texas Applicability
12 Standards behind the face of the curb.

13 3, Shall have a means of emergency power disconnect. The means of emergency
14 disconnect shall be a Red Knox Remote Power Box® provided within 50 feet of the electric
15 vehicle charging station and supporting electric equipment, but no closer than 10 feet to
16 any charger or cabinet. The main EV charging disconnect shall be a Knox Remote Power
17 Box® mounted at a height between 5 to 6 feet from grade and include signage of a
18 minimum of 2-inch sized white letters on a red background. Sign verbiage shall read: "**FD**
19 **EMERGENCY MAIN SHUTOFF/EV CHARGING STATIONS.**"

20 (17) Section 323.2. Added to read: Requirements. Electric vehicle charging stations shall be installed
21 in accordance with NFPA 70 (NEC). Electric vehicle charging equipment shall be listed and
22 labeled in accordance with UL 2022. Electric vehicle supply equipment shall be listed and
23 labeled in accordance with UL 2594 or equivalent.

24 (18) Section 323.3. Added to read: Indoor Electric Charging Stations (EVCS). For any new or
25 remodeled development with indoor electric vehicle charging stations, the following shall be
26 provided:

27 1. Manual hose stations capable of providing 250gpm (gallons per minute) designed as
28 part of the horizontal standpipe system per NFPA 14. Class 1 hose stations will be provided
29 within 200 feet of all portions of the vehicle charging area.

30 2. Sprinkler system capable of providing a minimum density of 0.3gpm/ft².

31 3. An Emergency Response Plan (ERP) that includes emergency response actions (upon
32 detection of a fire or possible fire) is required regardless of battery volume amount. The
33 ERP shall include labeled locations for charging stations electrical disconnecting means
34 and staff shall be trained to disconnect power from affected charging stations.

35 4. Main Charging Disconnect at the exterior of the building no more than 25 feet from the
36 building's electric main shutoff. The main EV charging disconnect shall be a Knox Remote
37 Power Box® mounted at a height between 5-6 feet from grade and include signage of
38 minimum of 2-inch white letters on a red background. Sign verbiage shall read: "**FD**
39 **EMERGENCY MAIN SHUTOFF/EV CHARGING STATIONS.**"

40 5. Automatic smoke detectors shall be provided and connected to a new or a existing fire
41 alarm system installed in accordance with section 907. Such a system shall activate
42 audible and visual signals at a constantly attended location that notifies the fire department
43 of an alarm event.

44 6. Smoke and heat removal vents or mechanical smoke removal systems shall be installed
45 in all occupancies with indoor charging stations regardless of square footage, and
46 installation standards shall comply with Section 910 of the International Fire Code.

47 7. All charging stations and electrical components of the system shall be installed in
48 accordance with the NEC.

- 1 (19) Section 503.2.1. Amended to read: Dimensions. Fire apparatus access roads shall have an
2 unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security
3 gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than
4 14 feet. Where fire apparatus access roads have two-way traffic the fire lanes shall meet the
5 minimum city width requirement of 26 feet.
- 6 (20) Section 503.2.3. Amended to read: Fire Lane Access/All Weather Surface. Facilities, buildings,
7 or portions of buildings hereafter constructed shall be accessible to fire department apparatus
8 by way of an approved fire apparatus access road with either asphalt or concrete surface
9 capable of supporting the imposed load of a fire apparatus weighing up to 80,000 pounds. The
10 required surface shall be in place before combustible materials are brought to the job site or
11 property and the site fire hydrants shall be fully operational.
- 12 (21) Section 503.2.9. Added to read: Right In/Right Out Curbing. Where curbing for right in/right out
13 is required in a defined fire lane and the approved width of the fire lane is compromised or
14 narrowed by the curbing, the curbing shall be constructed as a laydown or mountable curbing
15 capable of supporting the imposed load of fire apparatus vehicles weighing up to 80,000 pounds
16 and no signage shall impede the path of the fire vehicle on or around the curbing.
- 17 (22)Section 506.1. The last sentence is repealed in its entirety, and is replaced with the following: The
18 key box shall be a Knox-Box® and shall contain keys to gain necessary access as required by
19 the fire code official. A key box is required in all commercial occupancies that have an alarm
20 system, sprinkler system, standpipe system, any type of fire suppression system, any
21 commercial building over 5,000 square feet or any commercial structure over 1,000 square feet
22 that has two or more businesses or suites, any commercial business with an extraordinary
23 hazard, and for any gated community or apartment complex. Knox® boxes shall be required at
24 the following locations visible from the fire lane access road on either side of the following:
25 building entrances, riser rooms, elevator lobbies, and gates if applicable. Install between 5 and
26 6 feet from the ground or sidewalk. The fire code official has the discretion to make changes
27 with complications.
- 28 (23)Section 506.1.1. Amended to read: Locks. An approved Knox® Padlock shall be installed on gates
29 or similar barriers when required by the fire code official.
- 30 (24) Section 506.1.3. Added to read: Electric Vehicle Charging Station (EVCS) Knox Remote Power
31 Box®. All electric vehicle charging stations shall provide a fire department emergency power
32 disconnect, and such disconnect shall be a Red Knox Remote Power Box®. For all outdoor
33 EVCS, the Knox Remote Power Box® shall be installed within 50 feet of the EVCS and
34 supporting electric equipment, but no closer than 10 feet to any charger or cabinet. For all indoor
35 charging stations, a Knox Remote Power Box® shall be used as a Main Charging Disconnect
36 for all interior charging stations. Such disconnect shall be located on the exterior of the building
37 no more than 15 feet from the building's electric main shutoff. For both outdoor and indoor
38 charging stations, the Knox Remote Power Box® shall be mounted at a height between 5-6 feet
39 from grade and include signage of a minimum of 2-inch white letters on a red background. Sign
40 verbiage shall read: "**FD EMERGENCY MAIN SHUTOFF/EV CHARGING STATIONS.**"
- 41 (25) Section 507.4. Amended to read: Water Supply Test Date and Information. The water supply
42 test used for hydraulic calculation of fire protection systems shall be conducted in accordance
43 with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and
44 within one year of sprinkler plan submittal. The fire code official shall be notified prior to the
45 water supply test. Water supply tests shall be witnessed by the fire code official, as required.
46 The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the
47 design drawings. All fire protection plan submittals shall be accompanied by a digital or hard
48 copy of the water-flow test report, or as approved by the fire code official.
- 49 (26)Section 507.5.1. Amended to read: Where required. Where portions of the facility or building
50 hereafter constructed or moved into or within the jurisdiction shall meet the following fire hydrant
51 requirements: for commercial, multi-family or townhome properties, maximum hydrant spacing
52 is 300 feet (hydrant to hydrant). For one or two-family residential properties, the maximum

- 1 hydrant spacing is 500 feet (hydrant to hydrant). Approved fire hydrant distancing shall be
2 measured along the fire apparatus access road or approved fire lane around the exterior of the
3 facility or building. On-site fire hydrants and mains shall be provided where required by the fire
4 code official depending on exterior fire reaches, landscaping, and other considerations.
- 5 (27)\Section 507.5.1. ;hg; Exception 1 is repealed in its entirety. Exception 2 is repealed in its entirety.
- 6 (28)Section 507.5.1.1. Amended to read: Hydrant for any fire department connections system.
7 Buildings equipped with any fire department connections systems (FDCs) installed in
8 accordance with Section 903 and Section 905 shall have a fire hydrant within 100 feet of the
9 FDC as measured along the fire access road with an unobstructed path to the FDC. Remoting
10 the FDC is allowed on the building or the property to meet spacing requirements.
11 Exception: The distance shall be permitted to exceed 100 feet where approved by the fire code
12 official.
- 13 (29) Section 507.5.7. Added to read: Color Code for Private Hydrants and Draft Hydrants. Private
14 fire hydrants shall be painted and maintained silver. Draft hydrants from water storage shall be
15 painted and maintained yellow.
- 16 (30)Section 509.1. A sentence is added at the end of the section to read: Access to fire protection
17 equipment shall be within 15 feet of an exterior door, or there must be wall mounted post
18 indicator valves accessible from the exterior of the structure.
- 19 (31)Section 510.1. Amended to read: Emergency responder radio coverage in new buildings. Within
20 twelve months from occupancy permission, all new buildings shall have approved radio
21 coverage for emergency responders within the building based upon the existing coverage levels
22 of the public safety communication systems of the jurisdiction at the exterior of the building. This
23 section shall not require improvement of the existing public safety communication systems.
- 24 (32) Section 511. Added to read: Premises Emergency Summoning Devices.
- 25 (33) Section 511.1. Added to read: Emergency Summoning Devices. All emergency summoning
26 devices, including but not limited to: emergency poolside, fitness centers, and elevator
27 emergency summoning devices shall be maintained operational at all times and either
28 automatically dial the local emergency dispatch center or a third-party emergency answering
29 services capable of communication with the local emergency dispatch center. Clear operating
30 instructions for the emergency summoning device must be posted.
- 31 (34) Section 901.6.1.1. Added to read: Standpipe Testing. Building owners/managers must maintain
32 and test standpipe systems as per NFPA 25 requirements. The following additional
33 requirements shall be applied to the testing that is required every 5 years:
- 34 1. The piping between the Fire Department Connection (FDC) and the standpipe shall be
35 backflushed or inspected by an approved camera when foreign material is present or when
36 caps are missing and hydrostatically tested for all FDCs on any type of standpipe system.
37 Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for
38 the different types of standpipe systems.
 - 39 2. For any manual (dry or wet) standpipe system not having an automatic water supply
40 capable of flowing water through the standpipe, the tester shall connect hose from a fire
41 hydrant or portable pumping system (as approved by the fire code official) to each FDC,
42 and flow water through the standpipe system to the roof outlet to verify that each inlet
43 connection functions properly. Confirm that there are no open hose valves prior to
44 introducing water into a dry standpipe. There is no required pressure criteria at the outlet.
45 Verify that check valves function properly and that there are no closed control valves on
46 the system.
 - 47 3. Any pressure relief, reducing, or control valves shall be tested in accordance with the
48 requirements of NFPA 25. All hose valves shall be exercised.
 - 49 4. If the FDC is not already provided with approved caps, the contractor shall install such caps
50 for all FDCs as required by the fire code official.

- 1 5. Upon successful completion of a standpipe test, place a blue tag (as per Texas
2 Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service
3 (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-
4 marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5
5 Year Standpipe Test" at minimum.
- 6 6. The procedures required by the Texas Administrative Code Fire Sprinkler Rules with
7 regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including
8 the required notification of the local authority having jurisdiction (fire code official) shall be
9 followed.
- 10 7. Additionally, records of testing shall be maintained by the owner and contractor, if
11 applicable, as required by the State Rules mentioned above and NFPA 25.
- 12 8. Standpipe system tests where water will be flowed externally to the building shall not be
13 conducted during freezing conditions or during the day prior to expected nighttime freezing
14 conditions.
- 15 9. Contact the fire code official for requests to remove existing fire hose from Class II and III
16 standpipe systems where employees are not trained in the utilization of this firefighter
17 equipment. All standpipe systems where employees are not trained in the utilization of this
18 firefighting equipment. All standpipe hose valves must remain in place and be provided
19 with an approved cap and chain when approval is given to remove the hose by the fire
20 code official.
- 21 (35) Section 903.1. Amended to add the following sentence at the end of the section: On all automatic
22 sprinkler systems containing CPVC pipe, the pipe installers shall be trained and certified by the
23 manufacturer for the correct installation of CPVC piping and have proof of certification (Installer
24 Cards) if requested by the fire code official.
- 25 (36)Section 903.2.1.1. Amended to read: Group A-1. An automatic sprinkler system shall be provided
26 for Group A-1 occupancies where one of the following conditions exists:
 - 27 1. The fire area exceeds 5,000 square feet.
 - 28 2. The fire area has an occupant load of 300 or more.
 - 29 3. The fire area is located on a floor other than a level of exit discharge serving such
30 occupancies.
 - 31 4. The fire area contains a multitheater complex.
- 32 (37)Section 903.2.1.3. Amended to read: Group A-3. An automatic sprinkler system shall be provided
33 for Group A-3 occupancies where one of the following conditions exists:
 - 34 1. The fire area exceeds 5,000 square feet.
 - 35 2. The fire area has an occupant load of 300 or more.
 - 36 3. The fire area is located on a floor other than a level of exit discharge serving such
37 occupancies.
- 38 (38)Section 903.2.1.4. Amended to read: Group A-4. An automatic sprinkler system shall be provided
39 for Group A-4 occupancies where one of the following conditions exists:
 - 40 1. The fire area exceeds 5,000 square feet.
 - 41 2. The fire area has an occupant load of 300 or more.
 - 42 3. The fire area is located on a floor other than a level of exit discharge serving such
43 occupancies.
- 44 (39)Section 903.2.3. Amended to read: Group E. An automatic sprinkler system shall be provided for
45 Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 7,500 square feet in area.
 2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.
- (40) Section 903.2.4. Amended to read: Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:
1. A Group F-1 fire area exceeds 5,000 square feet.
 2. A Group F-1 fire area is located on any floor.
 3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 5,000 square feet.
 4. A Group F-1 occupancy is used to manufacture lithium-ion or lithium metal batteries.
 5. A Group F-1 occupancy is used to manufacture vehicles, energy storage systems or equipment containing lithium-ion or lithium metal batteries where the batteries are installed as part of the manufacturing process.
- (41) Section 903.2.4.4. Added to read: Group F-2. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-2 occupancy where one of the following conditions exists:
1. A Group F-2 fire area exceeds 5,000 square feet.
 2. A Group F-2 fire area is located on any floor.
 3. The combined area of all Group F-2 fire areas on all floors, including mezzanines, exceeds 5,000 square feet.
- (42) Section 903.2.7. Amended to read: Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
1. A Group M fire area exceeds 10,000 square feet.
 2. A Group M fire area is located above or below grade plane.
 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 10,000 square feet.
- (43) Section 903.2.8. A subsection 903.2.8.4 shall be added at the end of the section to read: Townhouses. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in townhouses.
- (44) Section 903.2.9. Amended to read: Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:
1. A Group S-1 fire area exceeds 5,000 square feet.
 2. A Group S-1 fire area is located above or below grade plane.
 3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 5,000 square feet.
 4. A Group S-1 fire area used for storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
 5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet.

- 1 (45)Section 903.2.9.1. Amended to read: Repair garages. An automatic sprinkler system shall be
2 provided throughout all buildings used as repair garages in accordance with Section 406.8 of
3 the International Building Code, as shown:
- 4 1. Buildings having two or more stories above grade plane, including basements, with a fire
5 area containing a repair garage exceeding 5,000 square feet.
 - 6 2. Buildings no more than one story above grade plane, with a fire area containing a repair
7 garage exceeding 5,000 square feet.
 - 8 3. Buildings with repair garages servicing vehicles parked in basements.
 - 9 4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area
10 exceeds 5,000 square feet.
 - 11 5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles
12 where the fire area exceeds 500 square feet.
- 13 (46)Section 903.2.10. Amended to read: Group S-2 enclosed parking garages. An automatic sprinkler
14 system shall be provided throughout buildings classified as enclosed parking garages in
15 accordance with Section 406.6 of the International Building Code, as follows:
- 16 1. Where the fire area of the enclosed parking garage exceeds 5,000 square feet; or
 - 17 2. Where the enclosed parking garage is located beneath other groups.
 - 18
 - 19 3. Subsection 3 is repealed in its entirety.
- 20 (47)Section 903.2.11.3. is repealed in its entirety and replaced with the following: Buildings three of
21 more stories in height. An automatic sprinkler system shall be installed throughout buildings
22 three or more stories in height.
- 23 Exception: Open parking structures.
- 24 (48) Section 903.2.11.7. is added to read: High Piled Combustible Storage. Any building classified
25 as a Group S occupancy or speculative building exceeding 5,000 square feet that has a clear
26 height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall
27 be considered to be high-piled storage. When a specific product cannot be identified
28 (speculative warehouse), a fire protection system and life safety features shall be installed for
29 Class IV commodities, to the maximum pile height.
- 30 (49)Section 903.2.13. A section shall be added to read: Group B. An automatic sprinkler system shall
31 be provided for Group B occupancies where the fire area exceeds 10,000 square feet. An
32 automatic sprinkler system shall be provided for any newly constructed Group B animal housing
33 and care facility and for any existing Group B animal housing and facility increasing or extending
34 the floor area or height of its existing facility, in accordance with sections 903.3.1.1 and 903.4
35 regardless of the square footage or number of animals housed in the facility.
- 36 (50) Section 903.3.1.1. A sentence is added at the end of section to read: Fire hydrants will not be
37 allowed on the same water line as the fire sprinkler line.
- 38 (51) Section 903.3.1.2.2. A new subsection 6 is added at the end of the section to read: Sprinkler
39 protection shall be provided for all balcony closets.
- 40 6. Sprinkler protection shall be provided for all balcony closets.
- 41 (52) Section 903.3.1.3.1. A new subsection is added to read: Means of egress. Sprinkler protection
42 shall be provided in accessible spaces under stairs, including bathrooms and closets, regardless
43 of size.

1 (53) Section 903.3.1.4. A new section 903.3.1.4 is added to read: Freeze and protection. Freeze
2 protection systems shall be in accordance with the requirements of the applicable referenced
3 NFPA standards and this section.

4 (54) Section 903.3.1.4. A new subsection 903.3.1.4.1 is added to read: Attics. Only dry-pipe,
5 preaction or listed antifreeze automatic sprinkler systems shall be allowed to protect attic
6 spaces.

7 Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces
8 where:

9 1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease
10 of draining the attic system without impairing sprinklers throughout the rest of the building;
11 and

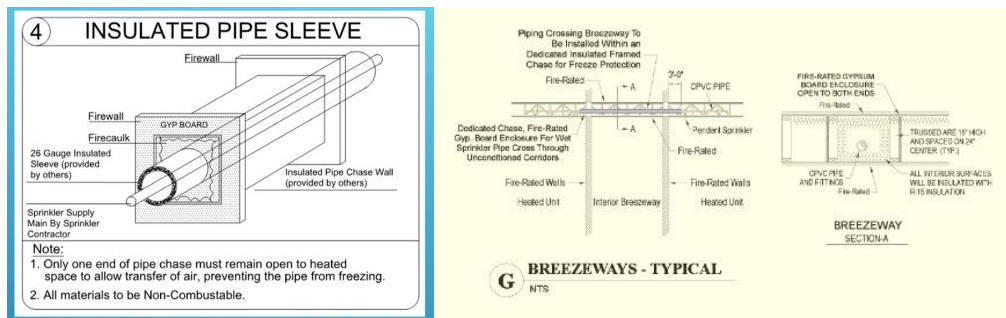
12 2. Adequate heat shall be provided for freeze protection as per the applicable referenced
13 NFPA standard; and

14 3. The attic space is a part of the building's thermal or heat envelope, such that insulation is
15 provided at the roof deck, rather than at the ceiling level.

16 (55) Section 903.3.1.4.2. A new subsection 903.3.1.4.2 is added to read: Heat trace/insulation. Heat
17 trace/insulation shall be only be allowed where approved by the fire code official for small
18 sections of large-diameter water-filled pipe.

19 (56) Section 903.3.1.4.3. A new subsection 903.3.1.4.3 is added to read: Heated chases. A thermal
20 circuit analysis to maintain the surface temperature of sprinkler pipes at or above 40 degrees
21 Fahrenheit shall be required. The analysis shall include calculations for insulated chases across
22 building breezeways or corridors and be submitted with sprinkler design plans.

23 Example acceptable design detail shall match the following and added to building/DACS:



24 (57) Section 903.3.5. A sentence is added at the end of the section to read: Water supply as required
25 for such systems shall be provided in conformance with the supply requirements of the
26 respective standards; however, every protection system shall be designed with a 10-psi safety
27 factor.
28

29 Exception added to read: A safety factor less than those defined in this section may be approved
30 by the fire code official only if historical water supply data is available to demonstrate that
31 reasonably expected fluctuations will not cause the water supply to fall below the system
32 demand.

33 (58) Section 904.3.4. A sentence is added to read: Automatic fire extinguishing systems that do not
34 activate in an alarm or are not connected to a fire alarm shall have at least one distinctive audible
35 and visual device to alert occupants once the agent discharge has begun.

36
37 (59) Section 905.7. Cabinets. A sentence is added at the end of the section to read: Such cabinet
38 containing the hose connections shall contain a fire extinguisher in conformity with section 906
39 in place of a fire hose.

- 1 (60) Section 906.3.1. A sentence is added at the end of the section to read: Light and ordinance
2 hazard occupancies shall have fire extinguishers rated at Type 3A:40BC.
- 3 (61) Section 907.1.4. A new section 907.1.4 is added to read: Design standards. Where a new fire
4 alarm system is installed, the devices shall be addressable.
- 5 (62)Section 907.2.2. A new subsection 907.2.2.2 is added to read: Animal housing and care facilities.
6 Existing fire areas containing animal housing or care facilities shall be provided with an
7 electronically supervised automatic smoke detection system. In spaces provided with a source
8 of heat or light but otherwise unconditioned, in lieu of smoke detection, the alarm system may
9 be activated by quick response heat detectors with a response time index of less than 100.
10 Existing animal housing or care facilities shall have two (2) years from April 1, 2023, to comply
11 with this section 907.2.2.
- 12 Exception: Smoke detectors and/or quick response heat detectors are not required where the
13 building is equipped throughout with an automatic sprinkler system installed in accordance with
14 sections 9.03.3 and 903.4 and activation of the automatic sprinkler system activates notification
15 of appliances as required by section 907.2.2.2.1.
- 16 (63)Section 907.2.2. A new subsection 907.2.2.2.1 is added to read: Notification of appliances.
17 Notification of appliances shall provide audible and visual alarm signals in office areas and other
18 areas within the fire area where no animals are housed or cared for. Notification appliances
19 within areas where animals are housed or cared for shall provide only visual alarm signals.
- 20 (64) Section 909.6.4. A new section is added to read: Stair pressurization systems. The stairs shall
21 be pressurized to accommodate the conditions of all doors closed and the ground floor exterior
22 stair door open with all other doors closed. The maximum allowable door opening force shall be
23 30 pounds with the system operating. Validation of the pressurization fan sizes shall include the
24 analysis described in section 909.4 under both winter and summer conditions and shall use the
25 allowable leakage ratios of section 909.5.1. A relief vent sized at 5,000 cfm and a 0.35-inch w.g.
26 (field adjustable) opening point shall be provided at the upper portion of the stair shaft. The
27 system shall have multiple injection points into the stairwell. The use of algebraic equations for
28 pressurization fan sizing shall only be acceptable for simple idealized buildings. Complex
29 systems for mixed-use high rises and very tall buildings shall be designed using a network
30 model. Third party acceptance testing shall be required.
- 31 (65) Section 912.2. Amended to read: Location. With respect to hydrants, driveways, buildings, and
32 landscaping, fire department connections shall be so located that fire apparatus and hose
33 connected to supply the system will not obstruct access to the buildings for other fire apparatus.
34 Buildings equipped with any fire department connections (FDCs) installed in accordance with
35 section 903 and section 905 shall have a fire hydrant within 100 feet of the FDC as measured
36 along the fire access road with an unobstructed path to the FDC. Remoting the FDC is allowed
37 on the building or the property to meet spacing requirements. Reference 507.5.1.1.
- 38 (66)Section 912.4.1. A sentence is added at the end of the section to read: Where required, Knox FDC
39 locking caps or plugs shall be installed.
- 40 (67) Section 915.1. Amended to read: General. New and existing buildings shall be provided with
41 carbon monoxide (CO) detection in accordance with sections 915.2 through 915.5.
- 42 (68)Section 915.1.1. Section 915.1.1 is repealed in its entirety.
- 43 1. .
- 44 (69) Section 9.15.2. Amended to read: Where required. Carbon monoxide detections shall be
45 provided in interior spaces, including Group B fire areas containing animal housing or care
46 facilities, other than dwelling units or sleeping units, that are exposed to a carbon monoxide
47 source in accordance with sections 915.2.1 through 915.2.3. Carbon monoxide detection for

- 1 dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in
2 accordance with section 915.2.4.
- 3 (70) Section 915.2.1. Amended to read: Interior spaces with direct carbon monoxide sources. In all
4 occupancies, including Group B fire areas containing animal housing or care facilities, interior
5 spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection
6 located in close proximity to the direct carbon monoxide source and in accordance with section
7 915.3.
- 8 Exception: Where environmental conditions in an enclosed space are incompatible with carbon
9 monoxide detection devices, carbon monoxide detection shall be provided in an approved
10 adjacent location.
- 11 (71) Section 915.2.2. Amended to read: Interior spaces adjacent to a space containing a carbon
12 monoxide source. In Groups A, B, E, I, M, and R occupancies, including Group B fire areas
13 containing animal housing or care facilities, interior spaces that are separated from and adjacent
14 to an enclosed parking garage or an interior space that contains a direct carbon monoxide
15 source shall be provided with carbon monoxide detection if there are communicating openings
16 between the spaces. Detection devices shall be located in close proximity to communicating
17 openings on the side that is furthest from the carbon monoxide source and in accordance with
18 section 915.3.
- 19 Exceptions:
- 20 1. Where communicating openings between the space containing a direct carbon monoxide
21 source and the adjacent space are permanently sealed airtight, carbon monoxide detection
22 is not required for the adjacent space.
- 23 2. Where the fire code official determines that the volume or configuration of the adjacent
24 interior space is such that dilution or geometry would diminish the effectiveness of carbon
25 monoxide detection devices in such spaces, detection devices additional to those required
26 in section 915.2.1 shall be located on the side of communicating openings that is closest
27 to the carbon monoxide source.
- 28 (72) Section 915.2.3. Amended to read: Interior spaces with forced-indirect carbon monoxide
29 sources. In all occupancies including Group B fire areas containing animal housing or care
30 facilities, interior spaces with forced-indirect carbon monoxide source shall be provided with
31 carbon monoxide detection in accordance with either of the following:
- 32 1. Detection in each space with a forced-indirect carbon monoxide source, located in
33 accordance with section 915.3.
- 34 2. Detection only in the first space served by the main duct leaving the forced-indirect carbon
35 monoxide source, located in accordance with section 915.3, with an audible and visual
36 alarm signal provided at an approved location.
- 37 (73) Section 915.2.4. Amended to read: Dwelling units and sleeping units. Carbon monoxide
38 detection for dwelling units and sleeping units shall comply with sections 915.2.4.1 and
39 915.2.4.2.
- 40 (74) Section 915.2.4. The exceptions in section 915.2.4 are repealed in their entirety.
- 41 (75) Section 915.2.4.1. Added to read: Direct carbon monoxide sources. Where a direct carbon
42 monoxide source is located in a bedroom or sleeping room, or bathroom attached to either,
43 including Group B fire areas containing animal housing or care facilities, carbon monoxide
44 detection, shall be installed in the bedroom or sleeping room. Where carbon monoxide detection
45 is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed

- 1 outside of each separate sleeping area in close proximity to bedrooms or sleeping rooms for
2 either of the following conditions:
- 3 1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed
4 garage.
 - 5 2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of
6 bedrooms or sleeping rooms.
- 7 (76) Section 915.2.4.2. Added to read: Forced-indirect carbon monoxide sources. Bedrooms or
8 sleeping rooms, including Group B fire areas containing animal housing or care facilities, in
9 dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source
10 shall be provided with carbon monoxide detection in accordance with section 915.2.4.1 or
11 section 915.2.3.
- 12 (77) Section 915.2.5. Section 915.2.5 is repealed in its entirety including the exceptions.
- 13 (78) Section 915.2.6. Section 915.2.6 is repealed in its entirety including the exception.
- 14 (79)Section 915.3. Amended to read: Location of detection devices. Carbon monoxide detection
15 devices shall be installed in accordance with the manufacturer's instructions in a location that
16 avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions
17 that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide
18 detection in air ducts or plenums shall not be permitted as an alternative to required detection
19 locations.
- 20 (80) Section 915.3.1. Section 915.3.1 is repealed in its entirety.
- 21 (81) Section 915.3.2. Section 915.3.2 is repealed in its entirety.
- 22 (82) Section 915.3.3. Section 915.3.3 is repealed in its entirety.
- 23 (83) Section 915.3.4. Section 915.3.4 is repealed in its entirety.
- 24 (84) Section 915.4. Amended to read: Permissible detection devices. Carbon monoxide detection
25 shall be provided by a carbon monoxide detection system complying with section 915.4.2 unless
26 carbon monoxide alarms are permitted by sections 915.4.1.
- 27 (85) Section 915.4.1. Amended to read: Carbon monoxide alarms. Carbon monoxide alarms
28 complying with sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon
29 monoxide detection system in both the following:
- 30 1. Dwelling units and sleeping units.
 - 31 2. Locations other than dwelling units or sleeping units, where approved, provided that the
32 manufacturer's instructions do not prohibit installation in locations other than dwelling units
33 or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a
34 normally unoccupied location is annunciated by an audible and visual sign in an approved
35 location.
- 36 (86) Section 915.4.1.1. A new subsection 915.4.1.1 is added to read: Power source. In buildings with
37 a wired power source, carbon monoxide alarms shall receive their primary power from a
38 permanent connection to building wiring, with no disconnecting means other than for overcurrent
39 protection, and shall be provided with a battery backup. In buildings without a wired power
40 source, carbon monoxide alarms shall be battery powered,

- 1 (87) Section 915.4.1.2. A new subsection 915.4.1.2 is added to read: Listings. Carbon monoxide
2 alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms
3 shall also be listed in accordance with UL 217.
- 4 (88) Section 915.4.1.3. A new subsection 915.4.1.3 is added to read: Interconnection. When more
5 than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms
6 to signal an alarm condition.
- 7 (89) Section 915.4.2. Amended to read: Carbon monoxide detection systems. Carbon monoxide
8 detection systems shall be installed in accordance with NFPA 72.
- 9 (90) Section 915.4.2.1. A new subsection 915.4.2.1 is added to read: Fire alarm system integration.
10 Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is
11 installed, carbon monoxide detection shall be provided by connecting carbon monoxide
12 detectors to the fire alarm system. Where a building fire alarm system or combination fire alarm
13 system is not installed, carbon monoxide detection shall be provided by connecting carbon
14 monoxide detectors to a carbon monoxide detection system complying with NFPA 72.
- 15 (91) Section 915.4.2.2. A new subsection 415.4.2.2 is added to read: Listings. Carbon monoxide
16 detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke
17 detectors shall be listed in accordance with UL 268 and UL 2075.
- 18 (92) Section 915.4.2.3. A new subsection 415.4.2.3 is added to read: Alarm notifications. For other
19 than Group E occupancies, activation of a carbon monoxide detector shall initiate alarm
20 notification in accordance with any of the following:
- 21 1. An audible and visible alarm notification throughout buildings and at the control unit.
- 22 2. Where specified in an approved fire safety plan, an audible and visible alarm in the
23 signaling zone where the carbon monoxide has been detected and other signaling zones
24 specified in the fire safety plan, and at the control unit.
- 25 3. Where a sounder base is provided for each detector, an audible alarm at the activated
26 carbon monoxide detector and an audible and visible alarm at the control unit.
- 27 For Group E occupancies having an occupant load of 30 or less, alarm notification shall be
28 provided in an on-site location staffed by school personnel or in accordance with the notification
29 requirements for other occupancies. For Group E occupancies having an occupant load of more
30 than 30, an audible and visible alarm shall be provided in an on-site location staffed by school
31 personnel.
- 32 (93) Section 915.4.3. Section 915.4.3 is repealed in its entirety.
- 33 (94) Section 915.4.4. Section 915.4.4 is repealed in its entirety.
- 34 (95) Section 915.5. Amended to read: Maintenance. Carbon monoxide alarms and carbon monoxide
35 detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's
36 instructions. Carbon monoxide alarms and carbon monoxide detectors that become inoperable
37 or begin producing end-of-life signals shall be replaced.
- 38 (96) Section 915.5.1. Subsection 915.5.1 is repealed in its entirety.
- 39 (97) Section 915.5.2. Subsection 915.5.2 is repealed in its entirety.
- 40 (98) Section 915.5.3. Subsection 915.5.3 is repealed in its entirety.
- 41 (99) Section 915.5.4. Subsection 915.5.4 is repealed in its entirety.

- 1 (100) Section 915.5.5. Subsection 915.5.5 is repealed in its entirety.
- 2 (101) Section 915.6. Amended to read. Carbon monoxide detection. Carbon monoxide detection shall
3 be installed in existing buildings in accordance with section 915.
- 4 (102) Section 915.6.1. Subsection 915.6.1 is repealed in its entirety.
- 5 (103) Section 1011.12. Stairway to roof. Second sentence is amended to read: In buildings for or more
6 stories above grade plane, one stairway shall extend to the roof surface from a protected
7 stairwell, unless the roof has a slope steeper than 4 units vertical in 12 units horizontal (33-
8 percent slope). Exception is repealed in its entirety.
- 9 (104)Section 1103.2. Amended to read: Emergency responder radio coverage in existing buildings.
10 Existing buildings that do not have approved radio coverage for emergency responders within
11 the building based upon the existing coverage levels of the public safety communication systems
12 of the jurisdiction at the exterior of the building, shall be equipped with such coverage according
13 to one of the following:
- 14 1. Whenever an existing wired communication system cannot be repaired or is being replaced,
15 or where not approved in accordance with Section 510.1. Exception 1.
- 16 2. Within a time frame established by the adopting authority, which shall be twelve months
17 from notice.
- 18 (105)Section 1103.7.8. Inserted. Animal housing or care facilities. An electronically supervised
19 automatic smoke detection system shall be installed in all fire areas containing an existing Group
20 B animal housing or care facility in compliance with and pursuant to section 907.2.2.2.
- 21 (106) Section 3103.2. Section 3103.2 is repealed in its entirety. Reference Chapter 1, subsection
22 105.5.51 for the amended requirement.
- 23 (107) Section 3201.3.2. The second sentence before the colon is amended to read: The floor plan
24 sign shall be mounted in a conspicuous place, near the main exit or exit access doorway and
25 riser room, and show the following:
- 26 (108) Section 3206.7.4. Section 3206.7.4 is amended to read: Marking on fire department access
27 doors. Fire department access doors shall be labeled on the exterior side with following sign:
- 28 FIRE DEPARTMENT ACCESS DOOR
29 DO NOT BLOCK
30 HIGH-PILED STORAGE
- 31 The sign must be reflective with a red background and white letters. Letters shall have a
32 minimum height of 2 inches (51 mm) with a minimum stroke of 3/8 inch (10 mm).
- 33 (109) Section 4104.2. Exception 2 is repealed in its entirety. Exception 3 is repealed in its entirety.
- 34 (110)Section 5504.3. A sentence is added at the end of the section to read: Storage of flammable
35 cryogenic fluids in stationary containers outside of buildings is prohibited within the City of Round
36 Rock city limits, with the exception of areas zoned for industrial use. Storage of flammable
37 cryogenic fluids may be permitted at the discretion of the fire chief following his review of the
38 proposed location and the fire protection for the storage area. Storage shall not be allowed within
39 100 feet of the property line of any Group E, I, or R occupancies.
- 40 (111)Section 5706.2.4.4. Amended to read: Locations where above ground tanks are prohibited.
41 Storage of Class I and II liquids in above ground tanks is prohibited within the City of Round
42 Rock city limits, with the exception of areas that are zoned for industrial use. Storage of Class I
43 and II liquids may be permitted at the discretion of the fire chief following his review of the
44 proposed location and the fire protection for the storage area. Storage shall not be allowed within
45 100 feet of the property line of any Group E, I, or R occupancies.

- 1 (112)Section 5804.2. A sentence is added at the end of the section to read: Storage of flammable or
2 combustible liquids in outside above ground tanks is prohibited within each and every zoning
3 district within the City of Round Rock, with the exception of those districts which are zoned for
4 industrial use. Installation of above ground tanks in industrial districts shall be permitted at the
5 discretion of the fire chief following his review of the proposed installation location and the fire
6 protection for the storage area. When used in conjunction with Chapter 23, above ground
7 storage will be allowed at the discretion of the fire chief. Tanks shall not be located within 100
8 feet of the property line of any Group E, I, or R occupancies.
- 9 (113)Section 6104.2. A sentence is added at the end of the section to read: Tanks shall not be located
10 within 100 feet of the property line of any Group E, I, or R occupancies.
- 11 (114)Appendix A is not adopted, and is repealed in its entirety.
- 12 (115) Appendix B, Section B105.2. Buildings other than one- and two-family dwellings, Amended to
13 read: Group R-3 and R-4 buildings and townhouses. Amended to read: The required fire flows
14 in buildings other than one- and two-family dwellings with fire sprinkler systems the fire flow
15 reduction shall be no more than fifty percent (50%). The fire code official shall have the authority
16 to allow 25% of the value of Table B105 only if historical water supply data is available to
17 demonstrate that reasonably expected fluctuations will not cause the water supply to fall below
18 the system demand.
- 19 (116) Appendix D, Section D102.1. Access and loading. Amended to read: Access and loading; fire
20 lane access/all weather surface. Facilities, buildings, or portions of buildings hereafter
21 constructed shall be accessible to fire department apparatus by way of an approved fire
22 apparatus access road with either asphalt or concrete surface capable of supporting the
23 imposed load of a fire apparatus weighing up to 80,000 pounds. The required surface shall be
24 in place before combustible materials are brought to the job site or property and site fire hydrants
25 shall be fully operational.
- 26 (117)Appendix D, Figure D103.1 dealing with cul-de-sac. Any reference to 96' or 96-foot diameter is
27 replaced with 100' or 100-foot diameter.
- 28 (118)Appendix L, Section L101.1 is adopted with the following amendment: A sentence is added at
29 the end of the section to read: 5. For new construction of eight (8) floors or more.

30
31
32 **III.**

33 That Chapter 16, Article III, Section 16-55 of the Code of Ordinances (2018
34 Edition), City of Round Rock, Texas, is amended to read as follows:

35 **Sec. 16-55. - Emergency access systems.**

36 Whenever any provision regarding the regulation of emergency access systems or gates contained in
37 the most recent edition of the International Fire Code adopted by the city are in conflict with the provisions
38 of this section, the provisions of this section shall govern.

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

- 42 *Gate opening system* means the 3M Opticom Priority Control System, Siren Operating
43 Sensor, or other substantially similar system approved by the fire marshal and compatible with
44 the equipment currently installed in the city's emergency vehicles.

