GOVERNING RESIDENTIAL HEALTH

Chair, Board of Environmental Health

Adopted

Manager, Department of Environmental Health

Date of Manager's Signature: 6/21/16

Attorney for the City & County of Denver
Chapter 1 Authority and Definitions
Section 1-101 Authority
Section 1-102 Definitions

Chapter 2 Minimum Housing, Safety, and Construction Standards
Section 2-201 Minimum Space and Location Requirements
Section 2-202 Egress
Section 2-203 Water Supply, Materials and Waste Plumbing
Section 2-204 Ventilation
Section 2-205 Lighting
Section 2-206 Electrical Requirements, Fixtures, and Prohibitions.
Section 2-207 Heating and Water Heating Facilities
Section 2-208 Exterior Walls, Roofs and Foundations.
Section 2-209 Interior Walls, Ceilings and Floors.
Section 2-210 Windows, Doors, Hatchways, and Direct Openings.
Section 2-211 Stairways
Section 2-212 Bathrooms
Section 2-213 Drainage of Storm Water
Section 2-214 Solid Waste
Section 2-215 Insect, Rodent and Animal Control

Chapter 3 Plumbing
Section 3-301 General Standards
Section 3-302 Fixtures and Maintenance.

Chapter 4 Maintenance of Utilities and Equipment
Section 4-401 General
Section 4-402 Gas Cooking Appliances
Section 4-403 Other Gas Appliances
Section 4-404 Disconnecting Utilities

Chapter 5 Lodging Facilities
Section 5-501 General
Section 5-502 Egress
Section 5-503 Bathroom and Water Closet Facilities
Chapter 1 Authority and Definitions

Section 1-101 Authority & Purpose

The Board of Environmental Health and the Manager of Environmental Health ("Manager") adopt these rules and regulations pursuant to the authority granted by the Charter of the City and County of Denver and Section 27 of the Denver Revised Municipal Code ("DRMC"), and supplement the provisions of Chapter 27, DRMC.

These rules and regulations contain the minimum standards necessary under section 27-19 (for basic equipment and facilities), section 27-20 (for light; ventilation; heating; and insect, rodent, vermin, and pest control), and section 27-22 (for space, use, and location) applicable to all dwellings and dwelling units; the minimum standards under section 27-24 (for sinks, bathrooms, water supply, water and sewer connections, privacy, rubbish storage, garbage disposal, heating, and ingress and egress) applicable to all rooming houses; and other rules and regulations determined necessary for the proper and effective enforcement of the provisions of article II, chapter 27, DRMC.

Dwellings shall be designed, maintained, and occupied in a manner that protects public health and safety and conforms to the minimum standards of habitability set forth in these rules and regulations.

Section 1-102 Definitions

Words not defined within this article shall be defined as set forth within a standard dictionary.

A. Accessibility means located on the same or adjacent floor without passing through any room of any other rooming unit, or means easily visible, attainable, or reachable as determined by the Manager.

B. Approved means constructed, installed and maintained in accordance with the Housing Code as determined by the manager.

C. Approved Water System means a potable water system approved by the Manager.

D. ASTM means the American Society for Testing Materials.

E. Basement means the portion of a dwelling between floor and ceiling that is partly below and partly above grade, the floor of which is less than four (4) feet below the average grade of the adjoining ground.

F. Basement Hatchway means an outside entrance to a basement.

G. Cellar is synonymous with basement.

H. Chimneys or Flues means conduits or passageways, vertical or nearly so, for conveying products of combustion to the outer air.

I. Clean and Sanitary means a condition free of visible dirt, debris, clutter, rubbish, trash, waste and free from other substances, contaminants, materials, or environmental conditions harmful to human health.
J. **Clean-out** means an opening into a chimney or plumbing drain for the purpose of removing material obstructing the chimney or drain.

K. **Compost** means the material or product which is developed under controlled conditions which results from biological degradation processes by which organic wastes decompose.

L. **Crawl Space** means a narrow space under a floor that allows access to electrical, heating, and plumbing utilities.

M. **Denver Building and Fire Code** means the building and fire code adopted under section 10-16 of the DRMC, including rules and regulations adopted pursuant thereto, future amendments, and successor code provisions.

N. **Deteriorated Paint** means paint that is chipping, peeling, flaking, cracking or otherwise separating from the substrate of the dwelling unit or structure.

O. **Door** means an opening in a solid wall for ingress and egress of people, including doorways, lintels or headers, casing, sills, and doors, with or without glazing.

P. **Draft Diverter** means a device attached to or made part of the vent outlet from an appliance and designed to: insure the ready escape of the products of combustion, in the event of no draft, back draft, or stoppage in the vent or flue beyond the draft hood; prevent a back draft from entering the appliance; and neutralize the effect of stack action of the flue upon operation of the appliance.

Q. **Dwelling** means any building that contains one or more dwelling units or rooming units used, intended, or designed to be built, used, rented, leased, let, sublet, or hired out to be occupied, or that is occupied for living purposes, and includes rooming houses but excludes temporary housing.

R. **Dwelling Unit** means a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation and includes single rooming units.

S. **Easily Cleanable Surface** means a smooth, durable surface, free from unsealed cracks, breaks, crevices, and impervious to amounts of water used in cleaning.

T. **Electrical Convenience Outlet** means a point on the electrical wiring system equipped with one (1) or more receptacles intended to receive attachment plugs from which electrical current is taken to supply electrical equipment.

U. **Elements** means wind, rain, snow, hail or sleet, or surface run-off water.

V. **Extermination** means the control and elimination of insects, rodents, vermin or other pests by eliminating their harborage places; by removing or making inaccessible materials that may serve as their food; or by poisoning, spraying, fumigating, trapping or similar means.

W. **Garbage** means the animal and vegetable waste resulting from the handling, preparation, cooking or consumption of food.

X. **Habitable Room** means a room designed to be used for living, sleeping, eating or cooking, excluding bathrooms, toilet compartments, closets, halls and storage places.
Y. **Hotel** means any dwelling, or that part of any dwelling, containing one (1) or more rooming units in which space is let to three (3) or more persons who are transients or permanent guests occupy a rooming unit.


AA. **Kitchen Sink** means a sink designed for washing kitchen utensils and the preparation of food.

BB. **Lead Hazard** means (1) the existence of deteriorated paint over a surface area larger than de minimis levels in the interior or exterior of a dwelling unit or structure constructed prior to January 1, 1979; or (2) the existence of deteriorated paint, in the interior or exterior of a dwelling unit or structure constructed prior to January 1, 1979, over a surface area smaller than de minimis levels but which, at the determination of the public health official, is likely to endanger the health of the public or the occupants of the dwelling unit or structure; or (3) the disturbance of lead-based paint or presumed lead-based paint without proper containment; or (4) the creation or maintenance of any other condition which may result in persistent and quantifiable lead exposure; or (5) the presence of lead-contaminated dust or lead-contaminated soil.

CC. **Lintel** means the beam or girder placed over an opening in a wall, and which supports the wall construction above.

DD. **Lodging Facility** means any hotel, motel, shelter or lodging house where space is let or offered to three (3) or more guests who are not considered permanent. This definition shall not include apartment or condominium settings.

EE. **Makeshift Repair** means a repair not made in accordance with the Housing Code and the Denver Building and Fire Code, accepted practices, prevailing standards, designs of licensed contractors, or manufacturer’s recommendations that are consistent with the Housing Code and Denver Building and Fire Code.

FF. **Privacy** means completely enclosed by rigid partitions, doors, or opaque windows, from floor to ceiling and wall to wall.

GG. **Rubbish** means combustible and noncombustible waste materials, household and yard debris and ashes.

HH. **Shared Area** means the space used for trash storage, halls, passageways, stairways, porches, yards, sidewalks, basements, and any other areas jointly used by occupants of two or more dwelling units.

II. **Solid Waste** means any garbage, refuse, recycled material, rubbish, and other discarded material.

JJ. **Stairway** means the stair stringers, risers, treads, handrails, and banister.

KK. **Trap** means a fitting or device in a plumbing system so designed and constructed as to provide when properly vented, a liquid seal which will prevent the back passage of air without materially affecting the flow of sewage or waste water through it.

LL. **Vent** means a pipe designed to convey the products of combustion from an appliance to a flue or chimney.

City and County of Denver Residential Housing Regulations Chapter 27 DRMC.
Adopted by the Board of Environmental Health on June 9, 2016.
Page 3 of 20
Window means an opening in a solid wall for the interior illumination and ventilation of a structure, including lintels or headers, casings, sills, frames, and glazing.

Chapter 2 Minimum Housing, Safety, and Construction Standards

Section 2-201 Minimum Space and Location Requirements

A. Minimum square footage and occupancy of a dwelling shall be determined by the Denver Building and Fire Code.

B. No basement or cellar space shall be let as a habitable room and no basement or cellar space shall be used as a dwelling unit or rooming unit unless:

1. The floor and walls are impervious to leakage of underground and surface runoff water and are free from dampness;
2. The total amount of light required in each room is equal to at least the minimum amount of light as required under section 2-205 of these regulations; and
3. The facilities for ventilation in each room are equal to at least the minimum as required under section 2-204 of these regulations.

C. All areas within a basement or cellar used for habitable purposes shall be entirely separated from any furnace room by at least one-hour (1 hour) fire resistive material as defined by the ASTM; this includes any door.

Section 2-202 Egress

A. Every dwelling unit shall have a means of egress leading to a safe and open space at ground level.

B. Every inside and outside stairway, every porch, and every appurtenance shall be maintained and kept in sound condition and good repair.

C. Doors, windows, corridors, stairways, fire escapes, and passageways, serving as ordinary or emergency exit routes shall be free of stored, discarded, or extraneous material, and in no case shall these routes be obstructed or locked to persons within the dwelling.

D. Separate dwelling units located in basements or cellars shall be provided with two (2) separate egress routes.

Section 2-203 Water Supply, Materials, and Waste Plumbing

A. Water Supply

1. All dwellings shall be connected to the municipal water system, or to an approved water system.

2. Potable and non-potable water supplies shall be distributed through systems entirely independent of each other, and any actual or potential cross-connections between such supplies are prohibited.
3. Potable water supply piping, water discharge outlets, back-flow prevention devices, or similar equipment shall not be installed so they may be submerged in any contaminated or polluted liquid or substance.

4. The water distributions system shall be protected from back-flow in accordance with Denver Building and Fire Code.

5. The rate of flow of water to each kitchen sink, lavatory, tub and shower shall be a minimum of one (1) gallon per minute, or as otherwise permitted by Denver Building and Fire Code.

B. **Materials**

1. Materials for water-distributing pipes and fittings shall be approved, if installed, in accordance with the Denver Building and Fire Code in force at the time of installation.

2. No piping material that has been used for other than a potable water supply system shall be re-used in the potable water supply system.

3. Soil and waste piping for a drainage system within a building shall be of cast-iron, galvanized wrought iron, galvanized steel, lead, brass, copper pipe or other approved materials required or permitted by the Denver Building and Fire Code.

4. All drains within buildings, when underground, shall be of approved heavy cast iron, soil pipe, or other materials required or permitted by Denver Building and Fire Code.

5. Water or waste piping and plumbing fixtures shall not be repaired in a makeshift or unapproved manner.

C. **Waste Plumbing**

1. No soil or waste stack shall be smaller than the largest horizontal branch connected thereto.

2. Any structure on which a building drain is installed shall have at least one stack vent or vent stack carried full size through the roof not less than three (3) inches in diameter or the size of the building drain, whichever is the lesser, or a functional equivalent.

---

**Section 2-204 Ventilation**

A. Every habitable room within each and every dwelling unit shall be provided with at least one (1) window or skylight, easily openable directly to outside air or other comparable means of ventilation, employing mechanical, electrical or natural methods.

B. The facilities for ventilation shall present an area of contiguous air between the inside of the room and the outdoor space of not less than one square inch of opening for each square foot of floor area for each habitable room.

---

**Section 2-205 Lighting**

A. Every habitable room in a dwelling or dwelling unit shall have at least one (1) window or skylight facing directly to the outside which shall be capable of providing a minimum of 54 lux of daylight illumination, measurable at the epicenter of the room, thirty (30) inches above floor level, with a standard light meter facing the light source at noon, Mountain Standard Time, with the sky of normal brightness.
B. The Manager may approve natural daylight illumination provided indirectly through openings into adjacent rooms, corridors, courts, and enclosed porches, provided that the light is in the amount of 54 lux; and provided that the openings to adjacent lighted areas are not readily closable.

C. Every public hall or stairway in or leading into every multiple dwelling shall have a minimum of 100 lux of illumination measurable with a standard light meter at floor level.

Section 2-206 Electrical Requirements, Fixtures, and Prohibitions

A. General
   1. Every outlet and fixture shall be installed in an approved manner and maintained in sound condition and good repair.
   2. Every habitable room shall contain one (1) electrical convenience outlet for each twenty (20) lineal feet, or major fraction thereof, measured horizontally around the room at the baseboard line, except that in each habitable room one (1) supplied electric light fixture will be accepted in lieu of one (1) of the required electrical convenience outlets, provided that each habitable room contain at least one (1) electrical convenience outlet.
   3. Every water closet compartment, bathroom, laundry room, furnace room and public hall shall contain at least one (1) ceiling or wall-type electric light fixture installed in an approved manner and maintained in good and safe working condition.
   4. The electrical service entrance shall have sufficient capacity to carry full power to each appliance served by outlets and fixtures.
   5. Each outlet and electrical fixture shall be deemed to be installed in an approved manner only if provision is made for a service entrance capacity sufficient for typical loads to the outlets and fixtures, and if provision is made for sufficient numbers of branch circuits to carry full power to appliances served by the fixtures and outlets.

B. Unapproved or Prohibited
   1. All non-stationary and makeshift outlets that have been added to the building without regard to the total circuitry shall be considered hazardous and unapproved, and shall be removed.
   2. Frayed and exposed wiring, wiring unprotected by proper conduit or covering, fixtures in disrepair, and wiring or fixtures repaired in a makeshift manner shall all be deemed unsafe, and removed, replaced, or repaired.
   3. Pull-chain switches shall not be installed in any bathroom, shower or tub-room, or toilet room.
   4. No extension cord from any electrical outlet shall extend from one room into another or extend across any doorway or pass through any wall or partition of any dwelling unit or room, or shall be located where foot traffic passes directly over the extension cord.
   5. Tacked extension cords and makeshift wiring shall be considered unsafe and unlawful.
Section 2-207 Heating and Water Heating Facilities

A. General
1. Gas supply pipes shall be free from internal obstructions, splits, crimps, or other imperfections which would render them unfit for the purpose intended and joints shall be constructed in safe and leak-proof fashion.

2. All water heaters and heating facilities, gas-fired space heaters and heating appliances, and gas logs or other gas-fired vented decorative appliances shall be: connected to the house gas piping outlet, equipped with external shut off valves adjacent to the appliance, and installed in accordance with Denver Building and Fire Code.

3. Boilers and furnaces shall be equipped with approved safety devices to limit high steam pressures, water temperatures, or air temperatures in warm air furnaces.

4. Each gas-fired boiler shall be equipped with a low water cut-off.

B. Heating
1. Every dwelling and dwelling unit shall have heating facilities that are installed in an approved manner and are maintained in sound condition and good repair, and are capable of safely and adequately heating all habitable rooms, bathrooms and water closet compartments located therein to a temperature of at least seventy degrees Fahrenheit (70°F) at a distance three (3) feet above floor level, when the temperature outside is minus five degrees Fahrenheit (-5°F). Such heating equipment shall be operated as reasonably necessary to maintain a temperature in all habitable rooms of seventy degrees Fahrenheit (70°F).

2. Gas-fired space heaters shall not be installed in any bathroom, room, sleeping room or in any space or room not properly vented, unless such heater is a through-the-wall type designed for such use and satisfies the following specifications:
   a. The combustion chamber must be sealed off from air.
   b. There must be an external source of combustion air from some area other than the bathroom, toilet room, sleeping room or other room not properly vented.
   c. The space heater must be vented to the outside atmosphere.
   d. The space heater shall not be installed under a window or door or any other opening into a dwelling, nor shall the vent from the said appliance be within twelve (12) inches laterally of any such openings or within twelve (12) inches of the finished exterior grade.

3. The use of un-vented, gas-fired space heaters and open-flame and radiant heaters is expressly prohibited.

4. Gas-fired heating appliances shall be connected to the house gas piping outlet, and shall be equipped with external manual cut off valves adjacent to such appliances.

5. Burners, orifices, and controls shall be accessible for observation, inspection, and service, and maintained to obviate the possibility of carbon monoxide production during operation.

6. Fuel-combustion heating appliances shall be vented to the atmosphere.

C. Water Heating
1. Every dwelling shall have supplied water-heating facilities that are installed in accordance with the Housing Code and the Denver Building and Fire Code, are maintained and operated in...
sound condition and good repair, properly connected with the hot water lines required under the provisions of this article, and are capable of heating water to such a temperature as to permit an adequate amount of water to be drawn at every required kitchen sink, lavatory basin, bathtub or shower at a temperature of not less than one hundred twenty degrees Fahrenheit (120°F), except for facilities providing assisted living that are required to comply with Chapter 26 DRMC.

2. Supplied water-heating facilities shall be capable of meeting the requirements of this section when the unit heating facilities required under these provisions are not in operation.

3. Gas-fired water heaters shall not be installed in any bathroom, toilet room, room used for sleeping purposes, or in any room or space not properly ventilated.

4. Storage type water heaters shall be at least six (6) inches away from unprotected combustible material and three (3) inches away from approved fire-resistant material or protected combustible materials.

5. Un-insulated tank water heaters shall not be installed in any room where the heat liberated will constitute a fire hazard.

6. Gas water heaters shall be connected to the house gas piping outlet, and shall be equipped with external shut off valves adjacent to the gas water heater and installed in accordance with the Denver Building and Fire Code.

7. Gas water heaters shall have down-draft diverters in the vent pipes of such appliances.

8. All closed system water heaters must be provided with an approved water pressure and/or temperature relief valve to minimize the possibility of explosions.

9. Gas-fired water heaters shall not be installed in pits or other places subject to flooding by water seepage.

10. Water heating facilities shall be considered adequate if:
    a. One hundred twenty degree Fahrenheit (120°F) water may be drawn at each sink, tub, or shower for a period of five (5) minutes; or
    b. The water heating equipment is equivalent to a gas-fired water heater with twenty (20) gallon storage capacity and twenty thousand (20,000) BTU/hr sea level input, having one hundred degree Fahrenheit (100°F) rise recovery capacity of twenty (20) gallons per hour as corrected for altitude in Denver.

D. Appliances
   1. Every gas appliance shall be located in a manner that permits access to the appliance for cleaning of heating surfaces, replacement of filters, blower motors, burners, controls and vent connections, lubrication of moving parts where required, and adjustment and cleaning of burners and pilots.

   2. Gas logs or other gas-fired vented decorative appliances shall be connected to the house gas piping outlet, and shall be equipped with external shut off valves adjacent to such appliance.

E. Venting
   1. Vents and vent-fittings shall be constructed of materials required or permitted by Denver Building and Fire Code.
2. Down-draft diverters shall be provided in the vents from gas and oil appliances.

3. A vent pipe shall be so installed as to avoid sharp turns or other construtional features which would create excessive resistance to the flow of the gaseous products. Horizontal runs of gas vents depending on natural draft shall not exceed fifteen feet provided that in no case may such horizontal runs exceed seventy-five percent (75%) of the vertical height of the flue, and on such approved horizontal runs, vents shall be securely supported by approved metal straps.

4. All vent pipe connections to a masonry chimney or flue shall be made with a slip joint, the thimble to be cemented into the chimney and not to extend into the chimney beyond the chimney lining.

5. An accessible and approved clean-out opening with a tight-fitting cover shall be provided at least six (6) inches below the lowest vent inlet into any unlined masonry chimney or flue; with the exception that chimneys which are a part of and supported by walls and terminating above any floor, commonly called shelf or bracket chimneys, shall not be used to vent any gas appliance. If it is not possible to install the clean-out six (6) inches below the inlet, a clean-out shall be provided by installing a capped tee in the vent connector next to the chimney.

6. Class A flues requiring that the occupant crawl to each clean-out shall not be regarded as chimneys possessing an accessible clean-out.

7. The cross-sectional area of any flue shall not be less than the cross-sectional area of the flue connection outlet of the appliance it serves. When additional vents from other appliances are connected, the vent area shall be equal to the vent area of the appliances having the largest vent and plus fifty percent (50%) of the areas of all additional smaller appliance vents or when all vent areas of such multiple connected appliances are substantially equal, the total vent area shall be not less than seventy-five percent (75%) of the combined areas of all connected appliance vents whichever results in the greatest vent area.

8. Single-walled metal vents or flues shall be not be less than six (6) inches from combustible material and shall not pass through combustible walls, floors, ceilings, or partitions unless they are guarded at point of passage by approved double metal ventilated or insulated thimbles. There shall be one (1) inch of clearance of Type B or double-walled pipe.

9. A gas appliance vent pipe may be connected to the vent pipe of another gas appliance through a suitable “Y” junction fitting.

Section 2-208 Exterior Walls, Roofs and Foundations

A. Foundation walls, exterior walls, roofs, and all appurtenances shall be free from holes, cracks, breaks, deteriorated paint, decay and erosions which would permit the entry of weather, water, pests, or vermin or permit the loss of heat. These components shall also be free from bulges, shifting of materials, loose material, which might fall or collapse, and shall be maintained in a sound condition and good repair.

B. Piers, columns, posts and other below grade foundation members shall be securely placed and free from decay and breaks.
Section 2-209 Interior Walls, Ceilings and Floors

A. Floors, interior walls and ceilings, and other members such as baseboards, moldings, and door frames shall be:
   1. Maintained in sound condition, good repair, and be secure; and
   2. Free from holes, cracks, breaks, dampness, mold associated with dampness, loose or peeling paint, lead hazards, loose or peeling plaster or wallpaper; and
   3. Free from sags, bulges, and unevenness that would permit harborage of insects and rodents or cause injury by tripping or from falling building material.

Section 2-210 Windows, Doors, Hatchways, and Direct Openings

A. Window structures, exterior doors, basement hatchways, and crawl space entrances shall protect against the elements; prevent the entry of insects, rodents, vermin, and other pests; and shall be constructed and maintained in sound condition and good repair.

B. Windows and doors that open to the exterior, or in the case of multi-unit dwellings where doors open to a common interior hallway, shall be fitted with appropriate locking mechanisms that are constructed and maintained in sound condition and good repair.

C. Windows shall be glazed and free from loose, broken or cracked glass that could cause injury to persons, allow the elements to enter the structure, or allow excessive heat loss from within.

D. Exterior doors shall fit doorway openings in a manner designed to prevent heat loss and prevent the entrance of the elements and insects, rodents, vermin, and other pests.

E. All basement and crawlspace hatchway entrances shall be constructed to minimize the danger of physical injury to occupants of the premises.

F. All required screens shall be free from tears, holes, or other imperfections that would admit insects detrimental to the health of occupants.

Section 2-211 Stairways

A. All stairways shall be constructed and maintained in sound condition and good repair.

B. Stairway stringers shall have solid bearing at top and bottom.

C. Stairways used for egress routes for habitable rooms shall have at least six-feet-six-inches (6’ 6”) headroom as measured vertically from the tread level.

D. Risers and treads shall be of uniform height and width throughout any one (1) flight.

E. Every inside stairway and every outside stairway attached to a dwelling and consisting of three or more treads shall be provided with handrails securely fastened to the wall or to a sturdy balustrade.

F. Every stairway exceeding eighty-eight (88) inches in width shall have intermediate handrails supported by a sturdy balustrade.
G. Hand rails shall be placed not less than thirty (30) inches or more than thirty-four (34) inches above the tread level.

H. Handrails need not be installed on stairways providing access to unused cellar or attic space.

I. Treads and balusters shall be intact and of sturdy construction.

J. Tread covering, if supplied, shall be firmly attached.

K. General construction and support of stairways shall be of such sturdiness as to support without danger the heaviest loads which might be exerted upon said stairway.

Section 2-212 Bathrooms

A. **Ventilation** Every bathroom, shower room, or water closet compartment shall be provided with the following:
   1. Ventilation to the outside air of at least forty (40) square inches cross-sectional area of duct; or
   2. At least one window openable to the outside, exposing at least forty (40) square inches of outside air.

B. **Floor Protection**
   1. The surface on every water closet or bathroom floor shall be constructed in a manner to be reasonably impervious to water and constructed of such material and in a manner rendering the surfaces to be easily cleanable and kept in a clean and sanitary condition. No unsealed wood, carpet, rough finished concrete, or cracked, torn or ill-fitting floor covering shall be acceptable for water closet compartments, bathrooms or shower rooms.
   2. Edges of floor covering shall be coved or extended under tightly applied quarter-round molding.
   3. Floor covering shall be laid down tight and free from air pockets and from any defect that might allow the passage of water or the harborage of vermin or bacteria.
   4. All holes cut in floor covering for the passage of plumbing fixtures or pipes shall be sealed to prevent passage of water or vermin.

C. **Electrical**
   1. All bathrooms shall have at least one GFCI electrical outlet.

Section 2-213 Drainage of Storm Water

A. All dwellings and associated appurtenances, as deemed necessary by the Manager, shall have a system that drains storm water from every roof and conveys all storm water away from every foundation so as not to cause dampness or flooding in basements, cellars, walls, ceilings, or floors of any dwelling and so as not to cause erosion of exterior surfaces.
B. All structures containing one or more dwelling units shall have firmly supported gutters and downspouts, or an equivalent storm water drainage and conveyance system that is free from leaks and obstruction.

C. Storm water drainage and conveyance systems shall be designed as such that any diverted storm water does not cause flooding or dampness to nearby dwellings.

Section 2-214 Solid Waste

A. Every dwelling unit shall be furnished with facilities whose location is approved for the storage of solid waste that are conducive neither to the propagation and harborage of rodents and insects nor to the creation of fire or any other hazard.

B. With the exception of compost, solid waste shall be stored in sound, sturdy, rodent-proof containers constructed of metal or equivalent nonabsorbent material.

C. Solid waste containers shall be provided in sufficient size and number so that solid waste does not accumulate in other than approved receptacles.

D. Solid waste shall be removed from the premises at a frequency that reduces offensive odors and prohibits excessive accumulation that would attract pests or allow solid waste to fall out of the container.

E. Every occupant of a dwelling or dwelling unit shall dispose of all solid waste which might provide food for insects and rodents, in a clean and sanitary manner, and at a frequency that reduces the accumulation of odors, by placing it in the solid waste facilities or storage containers required by paragraphs A and B of this section.

F. Solid waste shall not be strewn about any part of the dwelling, or on the ground surrounding any dwelling including any basement or cellar floor or premise thereof.

Section 2-215 Insect, Rodent and Animal Control

A. Every occupant, operator, or owner of a dwelling or dwelling unit shall be responsible as determined by the manager for the extermination of any insects, rodents or other pests therein or on the premises.

B. From May 1st to September 30th of each year, or any other period of time the Manager finds necessary based on conditions, every window or door way used for ventilation that opens from a dwelling to the outdoors shall be effectively protected with approved screens.

C. Birds, insects, rodents, and other pests shall be removed from control devices and the premises at a frequency that prevents their accumulation, decomposition, or the attraction of pests.

D. Interior and exterior openings provided for the passage of piping, wiring or similar items through walls, floors, soffits, roofs, ceilings, and the like shall be pest and vermin-proof.
Chapter 3 Plumbing

Section 3-301 General Standards

Every kitchen sink, lavatory basin, and bath tub shall be connected to both a hot and cold water supply in an approved manner.

A. **Kitchen Sink**
   1. Every dwelling unit shall have a kitchen sink properly connected to an approved water and sewer system which is in sound condition and good repair in an area or room delegated to cooking. The kitchen sink shall not be located in an area or room separate and apart from that delegated to cooking, without approval of the Manager.
   2. The internal surfaces shall be smooth, easily cleanable, and impervious to water and grease, and no smaller than twenty (20) inches by sixteen (16) inches, with a minimum uniform depth of six (6) inches and a maximum uniform depth of twenty (20) inches.
   3. Stone and concrete laundry tubs, lavatory basins or bathtubs shall not be acceptable as kitchen sinks.

B. **Water Closet**
   1. Every dwelling unit shall have a flush water closet toilet properly connected to an approved water and sewer system that is in sound condition and good repair in a room affording privacy to a person within. Such flush water closet shall have an integral, water-seal trap and be provided with an integral flushing rim constructed so as to flush the entire interior of the bowl.
   2. Water closets shall have smooth, impervious, easily cleanable surfaces free from cracks, breaks, leaks, or makeshift repairs.
   3. Water closets shall be equipped with seats and covers of smooth, durable, and easy to clean material impervious to water.
   4. Water closets having an invisible seal or an un-vented space, or having interior walls which are not thoroughly washed at each discharge, are prohibited.
   5. Direct flush valves connected to water closets shall be equipped with vacuum breakers.

C. **Lavatory Basin**
   1. Every dwelling shall have a lavatory basin in sound condition and good repair that is properly connected to an approved water and sewer system and is located in the same room as the required flush water closet or as near to that room as practical.
   2. The lavatory basin shall be designed, intended, and located for use exclusively for personal hygiene.
   3. Lavatory basin surfaces shall be smooth, unbroken, easily cleanable, and impervious to water and grease.
   4. Stone and concrete laundry tubs and sinks shall not be used as lavatory basins.

D. **Bathtubs and Showers**
   1. Every dwelling unit shall have a bathtub or shower stall within a room which affords privacy to a user.
2. Bathtubs and showers shall be in sound condition and good repair and shall be properly connected to an approved water and sewer system.

3. Bathtubs shall have a smooth, impervious, and easily cleanable inner surface.

4. Shower stalls shall have a leak-proof base finished surface and partitions shall be impervious to water, soap, and body acids.

5. Shower stalls or bathtub bases shall pitch sufficiently to drain completely, yet minimize slipping and shall be made of materials such as pre-cast stone, cement aggregates, performed metals or material of similar qualities.

6. Shower stalls or bathtub surfaces shall be of smooth, nonabsorbent materials without sharp corners.

7. Paint or other finish that readily peels shall not be used.

8. The entire assembled shower stall shall be rigid, watertight and easily cleanable, and shall not be less than thirty (30) inches in its shortest dimension, or have walls less than six (6) feet above the floor.

9. Built-in bathtubs with overhead showers shall have waterproof joints between the tub and adjacent walls that are waterproof.

Section 3-302 Fixtures and Maintenance

A. All plumbing fixtures and water and waste pipes shall be installed in an approved manner; free from defects, leaks, and obstructions; and otherwise installed and maintained in sound condition and good repair.

B. Plumbing fixtures, except those having integral traps, shall be separately trapped by a water seal trap, the later of which shall be placed as near the fixture outlet as possible.

C. The vertical distance from the fixture outlet to the trap weir shall not exceed twenty-four (24) inches, except in the case of flush water closets with integral water seal traps.

D. A two compartment sink may be installed on one trap, if one compartment is not more than six (6) inches deeper than the other and if the waste outlets are not more than thirty (30) inches apart.

E. No fixture shall be double trapped.

F. Clean-outs on a trap shall be made tight with a threaded clean-out plug and approved washer.

G. Clean-out shall be easily accessible.

H. Clean-outs shall be extended to the surface or provided with access doors.

I. If a clean-out plug is located where there is foot traffic, the head should be counter sunk to prevent accidents, or a recess in the floor must be provided.

J. Where grease interceptors exist, the size, type and location must meet the Denver Building and Fire Code.

K. Every grease interceptor shall be readily accessible.
L. All floor mounted fixtures shall be rigidly secured by screws or bolts.

M. All wall-hung fixtures shall be rigidly supported by metal hangers or bolts.

N. Pipe hangers and anchors shall be metal of sufficient strength to hold a proportional share of the pipe alignment.

O. All soil, waste, and water pipes shall be protected from freezing.

P. Vent pipes shall be made of materials approved by the Denver Building and Fire Code.

Q. No back vent shall be installed within two (2) pipe diameters of the trap weir.

R. Wet venting, stack venting, circuit and loop venting, relief venting and the size and length of vents shall be installed and maintained according to sound engineering practices.

S. Every occupant shall maintain and keep all plumbing within his or her dwelling unit free from filth, debris, garbage, litter, decayed organic matter, dust, garden soil, grease, and anything offensive to sight or smell, or anything that may serve as an attractant, food or harborage for pests and vermin.

Chapter 4 Maintenance of Utilities and Equipment

Section 4-401 General

All supplied facilities, pieces of equipment, or utilities in or about the premises of any dwelling unit shall be capable of performing their intended function and shall be constructed, installed and maintained in a manner that prevents against possible injury or harm to persons.

Section 4-402 Gas Cooking Appliances

A. Gas fueled appliances for cooking shall not be installed in rooms used for sleeping purposes and in no case shall such appliance be used for purposes of heating any portion of a dwelling.

B. All gas cooking appliances shall be connected to the house gas piping outlet, shall be equipped with external manual cut off valves adjacent to these appliances, and installed in accordance with the Denver Building and Fire Code.

C. Semi-rigid tubing may not pass through any wall, partition, floor or ceiling.

D. Gas cooking appliances shall be installed free from leaks or other defects that would render them a hazard to occupants.

E. All orifices, burners, and controls shall be kept in sound condition and good repair.

F. In no case shall gas cooking appliances be constructed, installed, or maintained in a manner that would permit carbon-monoxide production.
Section 4-403 Other Gas Appliances

A. All other gas fired appliances, such as clothes dryers connected to the house gas piping outlet, shall be equipped with external shut off valves adjacent to such appliance, vented to the outside atmosphere, and installed in accordance with the Denver Building and Fire Code.

B. In no case shall the appliances be constructed, installed, or maintained in a manner that would permit carbon-monoxide production or create a fire hazard.

Section 4-404 Disconnecting Utilities

It shall be unlawful for an owner, operator, manager, or other person in charge or control of any service, facility, equipment, or utility which is required by this article to take any action or fail to take any action which results in such service, facility, equipment, or utility being removed from, shut off, or disconnected from any single unit dwelling or dwelling unit in a multiple unit structure.

Chapter 5 Lodging Facilities

Section 5-501 General

A. It shall be unlawful for any person to operate a lodging facility, or let to another for occupancy any rooming unit, except in compliance with the following provisions:

1. Before the letting of any unit to any occupant or allowing occupancy thereof, the operator of every rooming house or other lodging facility shall thoroughly clean the unit and supply clean bed linens and towels.

2. The operator shall clean the unit, linen, and towels at least once per week.

3. The operator shall maintain the unit and all supplied items, including bedding, towels, glassware, and cups, in a clean and sanitary manner.

4. The operator of any rooming house or other lodging facility shall maintain the premises, including all walls, floors, and ceilings, in a clean and sanitary condition.

5. The owner of a lodging facility shall maintain the shared areas and the vacant units in a clean and sanitary condition.

6. Every room occupied for sleeping purposes by one (1) person shall contain at least seventy (70) square feet of floor space or four hundred (400) cubic feet of air space, and every room occupied for sleeping purposes by more than one (1) person shall contain at least fifty (50) square feet of floor space or four hundred (400) cubic feet of air space for each occupant thereof.

7. Every room within a lodging facility shall have a minimum of 100 lux of illumination measurable with a standard light meter thirty (30) inches above floor level.
Section 5-502 Egress

A. Every lodging unit shall have approved, safe, unobstructed means of egress leading to safe and open space at ground level. Rooming units located in basements or cellars shall be provided with dual egress.

B. Every lodging facility shall have an unobstructed means of egress to the ground level.

C. Every inside and outside stairway, every porch, and every appurtenance shall be maintained and kept in sound condition and good repair.

D. Doors, windows, corridors, stairways, fire escapes, ramps, and passageways serving as ordinary or emergency exit routes shall be free of stored, discarded, or extraneous material and in no case be obstructed or locked to persons within the building.

E. Two (2) or more separate routes of egress shall be available at all times to occupants of each occupied floor in buildings in which there is more than one rooming unit, provided that one (1) of the routes may be for emergency use only. Both of said routes shall be equipped in such a manner as to prevent the necessity of jumping or dropping to the ground in the event of fire.

Section 5-503 Bathroom and Water Closet Facilities

A. There shall be supplied at least one (1) flush water closet, lavatory basin, and bathtub or shower, properly connected to a water and sewer system in an approved manner and maintained in sound condition and good repair for each ten (10) persons or fraction thereof, including the operator's family wherever they share the use of the facilities. However, in a rooming house or other lodging facility where rooms are let only to males or only males are allowed to occupy, flush urinals may be substituted for not more than one-half (1/2) the required number of flush water closets.

B. All flush water closets shall have open-ended toilet seats.

C. All such facilities shall be located within the dwelling as to be accessible from a common hall or passageway to all persons sharing them.

D. Every lavatory basin and bathtub or shower shall be supplied with hot water at all times.

E. Every rooming house or other lodging facility where both sexes are accommodated shall have separate rooms with toilets located in the building. These rooms shall be conspicuously marked for each sex.