CHAPTER 2  
MESA BUILDING CODE  
(1154,1297,2190,2510,3003,3073,3694,4635,4790,5055)

SECTION:

4-2-1: INTERNATIONAL BUILDING CODE ADOPTED (4243,4635,4790,5055)
4-2-2: PENALTY CLAUSE (4243,4635)

4-2-1: INTERNATIONAL BUILDING CODE ADOPTED: (4243,4635)
That certain document known as the International Building Code, which has been published as a Code in book form by the International Code Council and entitled International Building code, 2006 Edition, together with the following appendices thereto: (4243,4635)

(A) Appendix C - Group U - Agricultural Buildings; (4243)
(B) Appendix E - Supplementary Accessibility Requirements Amended; (4243,4635)
(C) Appendix I - Patio Covers; (4243)
(D) Appendix J - Grading Amended; (4243,4635)

are hereby referred to, adopted, and made a part hereof as if fully set forth in this Section, with the following changes in and amendments to said Code: (4243,4635)

(A) Section 101.1 Title is amended to read as follows: (4243)

101.1 Title. These regulations shall be known as the "Mesa Building Code," may be cited as such, and will be referred to herein as "this Code." For administration of this Code, refer to Title 4, Chapter 1, the Mesa Administrative Code. (4243)

(B) Sections 101.2 through 115.5 inclusive are deleted in their entirety. (4243,4635,4790)

(C) Section 306.2 Factory Industrial F-1 Moderate-Hazard Occupancy is amended to read as follows:

306.2 Factory Industrial F-1 Moderate-Hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft (manufacturing, not including aircraft repair)
Appliances
Athletic equipment
Automobiles and other motor vehicles
Bakeries
Beverages; over 12-percent alcohol content
Bicycles
Boats
Brooms or brushes
Business machines
Cameras and photo equipment
Canvas or similar fabric
Carpets and rugs (includes cleaning)
Clothing
Construction and agricultural machinery
Disinfectants
Dry cleaning and dyeing
Electric generation plants
Electronics
Engines (including rebuilding)
Food processing
Furniture
Hemp products
Jute products
Laundries
Leather products
Machinery
Metals
Millwork (sash & door)
Motion pictures and television filming (without spectators)
Musical instruments
Optical goods
Paper mills or products
Photographic film
Plastic products
Printing or publishing
Recreational vehicles
Refuse incineration
Shoes
Soaps and detergents
Textiles
Tobacco
Trailers
Upholstering
Wood; distillation
Woodworking (cabinet) (4790)

(D) Section 308.2 Group I-1 is amended to read as follows: (4243,4635)

308.2 Group I-1. This occupancy shall include buildings, structures, or parts thereof housing more than sixteen (16) persons, on a twenty-four- (24) hour basis, who because of age, mental disability, or other reasons, live in a supervised residential environment that provides supervisory or personal care services. The occupants are capable of self-preservation and of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: (4243,4635)

1. Assisted living center, licensed by the State of Arizona Department of Health Services with more than sixteen (16) residents; (4243)
2. Residential board and care facilities; (4243)

3. Halfway houses; (4243)

4. Group homes; (4243)

5. Congregate care facilities; (4243)

6. Social rehabilitation facilities; (4243)

7. Alcohol and drug centers; (4243)

8. Convalescent facilities. (4243)

A facility such as the above with five (5) or fewer persons shall be classified as a Group R-3 or R-5 as applicable or shall comply with the Mesa Residential Code. A facility such as above, housing at least six (6) and not more than sixteen (16) persons, shall be classified as Group R-4. (4243,4635)

(E) Section 308.3 Group I-2 is amended to read as follows: (4243,4635)

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial care, or directed care services on a twenty-four- (24-) hour basis of more than five (5) persons who because of age, mental, or physical disability are not capable of self-preservation or responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: (4243)

1. Assisted living homes licensed by the State of Arizona Department of Health Services with five (5) or fewer residents that are not classified as R-3 or R-5; (4243,4635)

2. Hospitals; (4243)

3. Nursing homes (both intermediate-care facilities and skilled nursing facilities); (4243)

4. Mental hospitals; (4243)

5. Detoxification facilities. (4243)

A facility such as above with five (5) or fewer persons shall be classified as a Group R-3 or R-5 as applicable. (4635)
Section 308.5 Group I-4, Day Care Facilities is amended to read as follows: (4243,4635)

308.5 Group I-4, Day Care Facilities. This occupancy shall include buildings and structures occupied by persons of any age who receive custodial care for less than twenty-four (24) hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with ten (10) or fewer persons, including not more than five (5) infants two and one-half (2-1/2) years of age or less, shall be classified as Group R-3 or R-5 as applicable. Places of worship during religious functions are not included. (4243,4635)

308.5.1 Adult Care Facility. A facility that provides accommodations for less than twenty-four (24) hours for more than ten (10) unrelated adults and provides supervised care or personal care services shall be classified as Group I-4. (4243)

EXCEPTION: A facility where occupants are capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group A-3. (4243)

308.5.2 Child Care Facility. A facility that provides supervision and personal care on less than twenty-four- (24-) hour basis for more than ten (10) children two and one-half (2-1/2) years of age or less shall be classified as Group I-4. (4243)

EXCEPTION: A child day care facility that provides care for more than ten (10) but no more than one hundred (100) children two and one-half (2-1/2) years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E. (4243)

Section 310.1 Residential Group R is amended to read as follows: (4243,4635)

Section 310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I. Residential occupancies shall include the following: (4243)

1. R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including: (4243,4635)

   (a) Boarding houses (transient); (4243)

   (b) Hotels (transient); (4243)

   (c) Motels (transient). (4243)

2. R-2. Residential occupancies containing sleeping units or more than two (2) dwelling units where the occupants are primarily permanent in nature, including: (4243)

   (a) Apartment houses; (4243)

   (b) Boarding houses (nontransient); (4243)
(c) Convents; (4243)

(d) Dormitories; (4243)

(e) Fraternities and sororities; (4243)

(f) Monasteries; (4243)

(g) Vacation timeshare properties; (4243)

(h) Hotels (non-transient); (4243)

(i) Motels (non-transient). (4243)

3. R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4, R-5 or I and where the buildings do not contain more than two (2) dwelling units, or one (1) of the following: (4243,4635)

(a) Adult care facilities that provide accommodations for ten (10) or fewer persons of any age, for less than twenty-four (24) hours. Such adult care facilities that are within a single residence are permitted to comply as R-5. (4243,4635)

(b) Child care facilities that provide accommodations for ten (10) or fewer persons of any age, for less than twenty-four (24) hours. Such childcare facilities that are within a single residence are permitted to comply as R-5. (4635)

(c) Assisted living homes licensed by the State of Arizona Department of Health Services with five (5) or fewer residents that are capable of self-preservation and of responding to an emergency situation without physical assistance from staff. (4243,4635)

(d) Assisted living homes licensed by the State of Arizona Department of Health Services, including facilities providing directed care services, with five (5) or fewer residents that are not capable of self-preservation or of responding to an emergency situation without physical assistance from staff. Such assisted living homes shall be protected with automatic sprinkler systems in accordance with Section 903.3 and a smoke alarm system in accordance with Section 907.2.10.1.3. (4243,4635)

(e) Congregate living facilities with sixteen (16) or fewer occupants. (4635)

4. R-4. Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five (5) but not more than sixteen (16) occupants, excluding staff. Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 or R-5 except as otherwise provided for in this Code. All occupants shall be capable of self-preservation and of responding to an emergency situation without physical assistance from staff. R-4 occupancies shall include, but are not limited to: (4243,4635)
(a) Assisted living homes located in residentially zoned districts in accordance with Title 11 (Zoning) of the Mesa City Code licensed by the State of Arizona Department of Health Services with more than five (5) but not more than ten (10) residents. (4243)

(b) Assisted living centers located in commercially zoned districts in accordance with Title 11 (Zoning) of the Mesa City Code licensed by the State of Arizona Department of Health Services with more than five (5) but not more than sixteen (16) residents. (4243)

A facility such as above in which any occupant is incapable of self-preservation or of responding to an emergency situation without physical assistance from staff, shall be classified as I-2 and protected by an automatic sprinkler system and an automatic fire alarm system. (4243)

5. R-5 Residential occupancies arranged for occupancy as detached one- and two-family dwellings and multiple single-family dwellings (townhouses) and their accessory structures conforming with the Mesa Residential Code. R-5 occupancies may also include:

(a) Adult care facilities that provide accommodations for ten or fewer persons of any age for less than twenty-four (24) hours that are within a single residence. (4635)

(b) Child care facilities that provide accommodations for ten or fewer persons of any age for less than twenty-four (24) hours that are within a single residence. (4635)

(c) Assisted living homes licensed by the State of Arizona Department of Health Services with five (5) or fewer residents that are capable of self-preservation or responding to an emergency situation without physical assistance from staff. (4635)

(d) Assisted living homes licensed by the State of Arizona Department of Health Services, including facilities providing directed care services, with five (5) or fewer residents that are not capable of self-preservation or responding to an emergency situation without physical assistance from staff. Such assisted living homes shall be protected with automatic sprinkler systems in accordance with Section 903.3 and a smoke alarm system in accordance with Section 907.2.10.1.3. (4635)

(e) Congregate living facilities with sixteen (16) or fewer occupants. (4635)

(H) Section 310.2 Definitions is amended by modifying the definitions of Personal Care Service and Residential Care/Assisted Living Facilities and by adding definitions of Directed Care Service, Supervisory Care Service, and Nursing Home, to read as follows: (4243,4635,4790)

**DIRECTED CARE SERVICE**: the care of residents who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions. Directed care services includes providing life sustaining programs and services, and may include personal care or supervisory care services. (4790)

**NURSING HOME**: a facility that provides nursing services to residents. Nursing services include the curative, restorative, and preventive aspects of nursing care that are performed at the direction of a physician by or under the supervision of a registered nurse licensed by the state. (4790)
PERSONAL CARE SERVICE: the care of residents who do not require chronic or convalescent medical or nursing care. Personal care service includes assisting with activities of daily living that can be performed by persons without professional skills or professional training and may include the coordination or provision of intermittent nursing services and the administration of medications and treatments by a nurse who is licensed by the State. (4243)

RESIDENTIAL CARE / ASSISTED LIVING FACILITIES: a building or part thereof housing persons on a twenty-four- (24-) hour basis, who because of age, mental disability, or other reasons, live in a supervised residential environment that provides personal care, supervisory care, or directed care services. This classification shall include, but not be limited to, the following: assisted living facilities, residential board and care facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers, and convalescent facilities. (4243)

SUPERVISORY CARE SERVICE: the care of residents who require general supervision, including providing daily awareness of resident functioning and continuing needs, the ability to intervene in a crisis, and assistance in the self-administration of prescribed medications. Provision of any of the following services shall constitute supervisory care: cooking or meal service, laundry service, linen or maid service. (4790)

(I) Section 310 Residential Group R is amended by adding a new Section 310.3 Security Standards at the end of the section to read as follows: (4243,4635)

310.3 Security Standards. (4243)

310.3.1 Requirements. All dwelling units shall conform to the following minimum security requirements: (4243)

1. All main or front-entry doors shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. Such view may be provided by a door viewer having a field of view of not less than one hundred eighty (180) degrees or through windows. (4243)

2. All exterior swinging doors shall be of solid core or metal skin construction, including the nonglazed portion of exterior glass insert doors. (4243)

3. Open spaces between trimmers and wood exterior doorjambs shall be solid shimmed, extending not less than six inches (6") above and below the deadbolt strike plate. Deadbolt strike plates for exterior door locks shall be attached to wood jambs with not less than two (2) No. 8 by two-inch (2") screws or when attached to metal jambs, shall be attached with not less than two (2) No. 8 machine screws. (4243)

4. Exterior doors with hinge pins exposed on the outside shall use nonremovable pin hinges or standard pin hinges with the pins modified to prevent the removal of the door from the exterior. (4243)

5. All exterior sliding doors shall be constructed and installed so as to prohibit the raising, sliding, or removal of the sliding section from the track while in the closed and locked position. The stationary section shall not be removable from the outside. Such sliding doors shall be provided with an auxiliary or additional locking device operable from the inside without the use of a key or special knowledge or effort. (4243)
6. All exterior swinging doors and doors from a dwelling to an attached garage shall be equipped with a deadbolt lock. Such deadbolt locks shall: (4243)

   (a) Have a minimum one-inch (1") bolt throw and receiving strike-plate hole one-quarter inch (1/4") deeper than the projected bolt throw, and (4243)

   (b) Have a wrench-resistant collar, and (4243)

   (c) Have fasteners which thread into the cylinder body. (4243)

Deadbolt locks installed on the front or main-entry door shall be key operated from the exterior and operable from the inside without the use of a key. (4243)

Exterior windows shall be constructed and installed so as to prohibit raising, sliding, or removal of the moving section while in the closed and locked position. A passive window panel shall have weather-strip molding or glazing bead which is not easily removed from the outside to prevent removal of the window glass. (4243)

7. All garage doors not equipped with a power-operated mechanism shall be equipped with at least two (2) locking devices of the following types: (4243)

   (a) Throw bolt or flush bolt; (4243)

   (b) Cylinder-type lock; (4243)

   (c) Padlock and hasp; (4243)

   (d) Electrical-power-operated mechanism with automatic locking device. (4243)

   (e) All garage doors shall be capable of being unlocked and operable from inside the garage without the use of electrical power. (4243)

   (f) Access doors to attic space shall be located in the interior of the dwelling unit or within a secured enclosed room or garage, provided that if no interior location is available, a metal access door secured with a steel hasp and a heavy-duty lock may be located on the exterior. (4243)

310.3.2. The requirements of this Section are not intended to prevent the use of any device, hardware, or method of construction not specifically prescribed when such alternate device, hardware, or method of construction provides equivalent security, subject to the approval of the Building Safety Director. (4243)

310.3.3. The requirements of this Section are not intended to prevent egress, and devices shall not be installed in a manner to prevent proper egress through doors or bedroom windows as required. (4243)
Section 311 Storage Group S is amended to read as follows:

Section 311
Storage Group S

311.1 Storage Group S. Storage Group S occupancy includes, among others, the use of a building or structure, or portion thereof, for storage that is not classified as a hazardous occupancy. (4790)

311.2 Moderate-Hazard Storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

- Aerosols, levels 2 and 3
- Aircraft hangar
- Bags: cloth, burlap and paper
- Bamboo and rattan
- Baskets
- Belting: canvas and leather
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
- Cardboard and cardboard boxes
- Clothing, woolen wearing apparel
- Cordage
- Dry boat storage (indoor)
- Furniture
- Furs
- Glues, mucilage, pastes and size
- Grains
- Horns and combs, other than celluloid
- Leather
- Linoleum
- Lumber
- Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.6)
- Photo engravings
- Resilient flooring
- Silks
- Soaps
- Sugar
- Tires, bulk storage of
- Tobacco, cigars, cigarettes and snuff
- Upholstery and mattresses
- Wax candles (4790)

311.3 Low-Hazard Storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic trim, such as knobs, handles or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

- Asbestos
- Beverages up to and including 12-percent alcohol in metal, glass or ceramic containers
- Cement in bags
- Chalk and crayons
Dairy products in nonwaxed coated paper containers
Dry cell batteries
Electrical coils
Electrical motors
Empty cans
Food products
Foods in noncombustible containers
Fresh fruits and vegetables in nonplastic trays or containers
Frozen foods
Glass
Glass bottles, empty or filled with noncombustible liquids
Gypsum board
Inert pigments
Ivory
Meats
Metal cabinets
Metal desks with plastic tops and trim
Metal parts
Metals
Mirrors
Oil-filled and other types of distribution transformers
Parking garages, open or enclosed
Porcelain and pottery
Stoves
Talc and soapstones
Washers and dryers (4790)

(K) Section 402.8 Automatic Sprinkler System shall be amended by deleting the Exception. (4243,4635)

(L) Section 403.2 Automatic Sprinkler System shall be amended by deleting Exceptions 1 and 2. (4243,4635)

(M) Section 404.3 Automatic Sprinkler System shall be amended by deleting Exceptions 1 and 2. (4243,4635)

(N) Section 406.1.2 Area Increase is amended to read as follows: (4243,4635)

406.1.2 Area Increase. Group U occupancies used for the storage of private or pleasure-type motor vehicles where no repair work is done or fuel dispensed are permitted to be three thousand (3,000) square feet (279 m²), when the following provisions are met: (4243)

1. For a mixed-occupancy building, the exterior wall and opening protection for the Group U portion of the building shall be as required for the major occupancy of the building. For such mixed-occupancy building, the allowable floor area of the building shall be as permitted for the major occupancy contained therein. (4243)

2. For a building containing only a Group U occupancy, the exterior wall and opening protection shall be as required for a Group R-1 or R-2 occupancy. (4243)
More than one (1) three-thousand- (3,000-) square-foot (279 m²) Group U occupancy shall be permitted to be in the same building, provided each three thousand- (3,000-) square-foot (279 m²) area is separated by fire walls complying with Section 705. (4243)

The allowable building areas specified in this Section may be doubled for carports that are single-occupancy structures, and constructed of noncombustible materials. (4243)

(O) Section 410.6 Automatic Sprinkler System shall be amended by deleting Exception 2. (4243,4635)

(P) Section 411.4 Automatic Sprinkler System shall be amended by deleting the Exception. (4243,4635)

(Q) Section 502.1 Definitions is amended by adding a new definition as follows:

Gross Leasable Area, Tenant Suite. The total floor area designed for tenant occupancy and exclusive use. The area of tenant occupancy is measured from the centerlines of joint partitions to the outside of the tenant walls. All tenant areas, including areas used for storage, shall be included in calculating gross leasable area. (4635)

(R) Section 508.2.3 Protection is amended to read as follows:

508.2.3 Protection. (4635)

Where an automatic fire-extinguishing system or an automatic sprinkler system is provided in accordance with Table 508.2, these systems shall be installed in accordance with Section 903.3.1. (4635)

EXCEPTION: In buildings or portions of buildings complying with the provisions of the International Existing Building Code or Chapter 34 of this Code, automatic fire sprinkler systems shall be installed as required for existing buildings. (4635)

(S) Section 903.2 Where Required is amended to read as follows: (4243,4790)

903.2 Where Required. Approved automatic sprinkler systems shall be provided in the locations described in this Section. (4243)

903.2.1 New Buildings or Structures. All areas of new buildings or structures, and other locations required by this Chapter or the Mesa Fire Code, shall be provided with an automatic fire sprinkler system complying with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 as applicable. Automatic sprinkler systems shall be considered as "not otherwise required by the code" when such systems are required only due to Mesa amendments to the International Building Code and International Fire Code. (4243,4579)

EXCEPTIONS: Unless the use of the facility otherwise requires automatic fire sprinkler protection, fire sprinkler systems shall not be required for the following: (4243)

1. R-5 occupancies complying with the Mesa Residential Code, and R-3 occupancies not including residential care or assisted living facilities. (4243,4579,4790)
2. Detached unoccupied telecommunications buildings not exceeding five hundred (500) square feet. (4243,4579,4790)

3. Detached gazebos and ramadas. (4243,4579,4790)

4. Detached restroom facilities associated with golf courses, parks, and similar uses. (4243,4579,4790)

5. Detached guardhouses less than three hundred (300) square feet in floor area. (4243,4579,4790)

6. Detached non-combustible shade canopies less than five thousand (5,000) square feet in roof area that are not closer than five (5) feet to any building, property line or other shade canopy, and that shade one of the following: vehicle parking, vehicle washing facilities or vehicle fuel dispensing stations. (4243,4579,4790)

7. Detached nonresidential buildings less than three hundred sixty (360) square feet in floor area. (4243,4579,4790)

8. Group B occupancies less than five thousand (5,000) square feet, excluding outpatient surgery clinics. The fire wall provisions of the Mesa Building Code, Section 705 of the IBC, shall not apply to this exception for determining building area. (4332,4579,4790)

9. Other buildings or structures accessory to and located on the same lot with one- (1-) and two- (2-) family dwellings or R-3 occupancies, not including residential care or assisted living facilities in R-3 occupancies. (4243,4579,4790)

10. Fabric shade canopies less than five thousand (5,000) square feet; not closer than five feet (5') to any building, property line, or other shade canopy; and shading one (1) of the following: vehicles for sale at a dealership, playground equipment, or outdoor eating areas without cooking. (4243,4579,4790)

11. Portable storage containers used for storage purposes and not closer than five feet (5') to any building, property line, or other container. (4243,4579,4790)

12. Exterior roofs, overhangs or canopies of Type I, II, or III construction with no combustible storage beneath. (4243,4579,4790)

13. Exterior covered/enclosed walkways of Type I, II, or III construction, not more than twelve (12) feet in width with no combustible storage beneath and enclosing walls that are at least fifty percent (50%) open. (4243,4579,4790)

903.2.2 Residential Care/Assisted Living Facilities. All occupancies licensed by the Arizona Department of Health Services or the Arizona Department of Economic Security to provide nursing services, directed care services, supervisory care services, and/or personal care services shall be provided with an automatic fire protection system complying with Section 903.3, as applicable, and shall utilize fast-response or residential sprinkler heads appropriate for the specific occupancy. The fire sprinkler system activation and control valves shall be monitored by an approved central station service. (4243)
EXCEPTIONS:

1. State-licensed residential care/assisted living facilities in which all of the care recipients are capable of self-preservation and responding to an emergency situation without assistance from another person. (4243)

2. State-licensed residential care/assisted living facilities in which some or all of the care recipients are incapable of self-preservation or of responding to an emergency situation without assistance from another person, and that legally existed prior to January 1, 2001. (4243)

903.2.3 One- (1-) and Two- (2-) Family Dwelling Sprinkler Option (5). All contractors of one- (1-) and two- (2-) family dwellings (R-5 occupancies) shall provide an option for residential fire sprinklers. The contractor or their agent shall provide an informational packet containing educational materials approved by the Mesa Fire Department, including a form explaining the option for residential sprinklers, to all prospective buyers and shall obtain a signed receipt for the educational materials from the prospective buyer. Upon the request and execution of a purchase agreement by the homebuyer, the contractor shall install the residential fire sprinklers. Such fire sprinkler systems shall comply with the requirements of Section 903.3.1.3. (4243,4790)

903.2.4 Group H-5 Occupancies. An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required by this Chapter for the occupancy hazard classifications in accordance with Table 903.2.4. (4243)

Where the design area of the sprinkler system consists of a corridor protected by one (1) row of sprinklers, the maximum number of sprinklers required to be calculated is thirteen (13). (4243)

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>OCCUPANCY HAZARD CLASSIFICATION</th>
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</thead>
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<tr>
<td>Fabrication Areas</td>
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<tr>
<td>Service Corridors</td>
<td>Ordinary Hazard Group 2</td>
</tr>
<tr>
<td>Storage Rooms Without Dispensing</td>
<td>Ordinary Hazard Group 2</td>
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<tr>
<td>Storage Rooms With Dispensing</td>
<td>Extra Hazard Group 2</td>
</tr>
<tr>
<td>Corridors</td>
<td>Ordinary Hazard Group 2</td>
</tr>
</tbody>
</table>

(4243)

903.2.5 Change of Occupancy. An automatic sprinkler system complying with Section 903.3 shall be provided for an existing building or portion thereof undergoing a change of occupancy. (4243,4790)

903.2.6 Additions. All additions to existing buildings or structures and all buildings or structures that are expanded by an addition(s) shall be provided with an automatic fire protection system complying with Section 903.3 as applicable. (4243)
EXCEPTIONS: (4243,4790)

1. Existing non-sprinklered R-3 and R-5 occupancies complying with the Mesa Residential Code, but not including residential care facilities. (4243,4790)

2. An existing non-sprinklered building or structure and additions to such existing building, provided the occupancy of the existing building is not changed, the addition is the same occupancy, and the total area of all such additions to the building do not exceed the allowable tabular amounts in Table 903.2.6. (4243)

These exceptions do not relieve the building from compliance with other Mesa City Code requirements. (4790)

<table>
<thead>
<tr>
<th>TABLE 903.2.6</th>
<th>ALLOWABLE ADDITIONS WITHOUT SPRINKLERS</th>
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</thead>
<tbody>
<tr>
<td>Existing Building Area</td>
<td>1 - 1,999 SF</td>
</tr>
<tr>
<td>Maximum Aggregate Addition Area - All Occupancies, Except B, Including Outpatient Clinics</td>
<td>1,000 SF</td>
</tr>
<tr>
<td>Maximum Aggregate Addition Area - B Occupancies, Not Including Outpatient Clinics</td>
<td>Maximum Total Aggregate Building Area Including All Additions = 5,000 SF</td>
</tr>
</tbody>
</table>

The above exceptions do not supersede other requirements of this Chapter or the Mesa Fire Code. (4243)

903.2.7 Rubbish and Linen Chutes. An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three (3) or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Chute sprinklers shall be accessible for servicing. (4243)

903.2.8 During Construction. Automatic sprinkler systems required during construction, alteration, and demolition operations shall be provided in accordance with the Mesa Fire Code. (4243)

903.2.9 Ducts Conveying Hazardous Exhausts. Where required by the Mesa Mechanical Code, automatic sprinklers shall be provided in ducts conveying hazardous exhaust, or flammable or combustible materials. (4243)
EXCEPTIONS: Ducts in which the largest cross-sectional diameter of the duct is less than ten inches (10") (254 mm). (4243)

903.2.9.1 Protection of Sprinklers. Automatic sprinklers installed in flammable vapor areas shall be protected from the accumulation of residue from spraying operations in an approved manner. Bags used as a protective covering shall be 0.003-inch-thick (0.076 mm) polyethylene or cellophane or shall be thin paper. Automatic sprinklers contaminated by overspray particles shall be replaced with new automatic sprinklers. (4790)

903.2.10 Commercial Cooking Operations. An automatic sprinkler system shall be installed in commercial kitchen exhaust hood and duct system where an automatic sprinkler system is used to comply with Section 904. (4243)

903.2.11 Other Required Suppression Systems. In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11 also require the installation of a suppression system for certain buildings and areas. (4243,4790)

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(4790)

(T) Section 903.3 Installation Requirements is amended to read as follows: (4243,4790)

903.3 Installation Requirements. Automatic sprinkler systems shall be designed and installed in accordance with Sections 903.3.1 through 903.3.7. (4790)

903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. (4790)

903.3.1.1 NFPA 13 Sprinkler Systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in this Section. (4790)
903.3.1.1.1 Exempt Locations. (4790)

Automatic sprinklers shall not be required in the following rooms or areas, when approved by the Fire Code Official, where such rooms or areas are protected with an approved automatic fire detection system, in accordance with Section 907.2, that will respond to visible or invisible particles of combustion. (Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment). (4790)

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard. (4790)

2. Any room or space where sprinklers are considered undesirable because of the unique nature of the contents. (4790)

3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours. (4790)

4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents. (4790)

903.3.1.2 Minimum Design Requirements. The minimum design requirements for fire sprinkler systems shall be as determined by the Mesa Fire Code or as defined in Section 903.3.1.1.2 whichever is greater. (4790)

903.3.1.2.1 Shell Buildings. The minimum sprinkler system design for shell buildings shall be ordinary group II as defined in 903.3.1.1. (4790)

Exception: the shell building sprinkler system may be designed to light hazard occupancy according to 903.3.1.1, where the property owner records a deed restriction limiting the occupancy of the building to Group B - business only and the building is used for Group B occupancy. (4790)

903.3.1.2.2 Buildings with Roof Structures over 20 feet. The minimum design requirements for buildings with roof structures greater than 20 feet above the finished floor shall be rack storage of Group IV commodities as defined in the Mesa Fire Code and Section 903.3.1.1. (4790)

Exception: the minimum sprinkler system requirements for buildings with roof structures greater than 20 feet above the finished floor may be designed to light hazard occupancy according to 903.3.1.1, where the property owner records a deed restriction prohibiting rack or high pile storage in the building and the building is not used for such purposes. (4790)

903.3.1.2 NFPA 13R Sprinkler Systems. Where allowed in buildings of group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13R. (4790)

903.3.1.2.1 Balconies and Decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units where the building is of type V construction. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction. (4790)
903.3.1.2.2 Required Fire Protection Systems. In R-1 and R-2 occupancies, provide an exterior access door to the fire sprinkler riser location. The size of the door shall allow for service and/or repair of the riser, valves and gauges from the exterior without requiring entry into a private dwelling or garage. (4790)

903.3.1.2.3 Attics. Sprinkler protection shall be provided for attics. For areas outside the dwelling unit, including attics, sprinkler design criteria shall comply with NFPA 13. (4790)

903.3.1.3 NFPA 13D Sprinkler Systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings shall be installed throughout in accordance with NFPA 13D. (4790)

903.3.2 Quick-Response and Residential Sprinklers. Where automatic sprinkler systems are required by this Code, quick-response or residential automatic sprinklers shall be installed in the following areas in accordance with section 903.3.1 and their listings: (4790)

1. Throughout all spaces within a smoke compartment containing patient sleeping units in group I-2 in accordance with this Code. (4790)

2. Dwelling units, and sleeping units in group R and I-1 occupancies. (4790)

3. Light-hazard occupancies as defined in NFPA 13. (4790)

903.3.3 Obstructed Locations. Automatic sprinklers shall be installed with due regard to obstructions that will delay activation or obstruct the water distribution pattern. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands, or equipment that exceeds 4 feet (1219 mm) in width. Not less than a 3-foot (914 mm) clearance shall be maintained between automatic sprinklers and the top of piles of combustible fibers. (4790)

Exception: kitchen equipment under exhaust hoods protected with a fire-extinguishing system in accordance with section 904. (4790)

903.3.4 Actuation. Automatic sprinkler systems shall be automatically actuated unless specifically provided for in this code. (4790)

903.3.5 Water Supplies. Water supplies for automatic sprinkler systems shall comply with this Section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this Section and City of Mesa Standard Detail M-31.6. (4790)

903.3.5.1 Domestic Services. Where the domestic service provides the water supply for the automatic sprinkler system, the supply shall be in accordance with this Section. (4790)

903.3.5.1.1 Limited Area Sprinkler Systems. Limited area sprinkler systems serving fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements: (4790)
1. Valves shall not be installed between the domestic water riser control valve and the sprinklers. (4790)

   Exception: an approved indicating control valve supervised in the open position in accordance with Section 903.4. (4790)

2. The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13R or NFPA 13D. (4790)

903.3.5.1.2 Residential Combination Services. A single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R. (4790)

903.3.5.2 Secondary Water Supply. A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings in Seismic Design Category C, D, E or F as determined by this Code. The secondary water supply shall have a duration of not less than 30 minutes as determined by the Occupancy Hazard Classification in accordance with NFPA 13. (4790)

   Exception: existing buildings. (4790)

903.3.5.3 Hydraulic Calculation for Fire Flow. Fire flows for sprinkler and hydrant systems shall be hydraulically calculated in accordance with the Mesa Fire Code, Sections 508.3 and 508.5, and the Mesa Fire Code appendices B and C. (4790)

903.3.6 Hose Threads. Fire hose threads and fittings used in connection with automatic sprinkler systems shall be National Standard Thread. (4790)

903.3.7 Fire Department Connections. Fire Department connections shall be located on the building, nearest to the fire access road, but away from the main entry to the building. Locations shall be subject to the approval of the Fire Code Official. Fire Department connections remote from the building served shall be permitted, provided such installations are clearly identified with address and building number by permanent, all-weather marking or signage, as determined by the Fire Code Official. (4790)

The size of the Fire Department connection and piping shall be dependent on the automatic sprinkler design flow. The maximum design flow for a 2-1/2 inch siamese connection is 500 gpm. For design flows greater than 500 gpm, provide a single 2-1/2 inch siamese connection and 5 inch storz connection. (4790)

903.3.8 Safety Factor. All fire sprinkler designs shall have a 10 percent (pressure) safety margin. (4790)

903.3.9 Tenant Improvements/Remodels. Fire sprinkler design drawings shall be required for tenant improvement or remodeling projects when 10 or more sprinkler heads are relocated and/or added to the existing system. (4790)

903.3.10 Freeze Protection. Exterior sprinkler piping a minimum of 2 inches in diameter may be used in lieu of freeze protection required by Section 903.3.1.1. (4790)
903.3.1.2.1 Balconies. Sprinkler protection shall be provided for covered exterior balconies, ground-floor patios, and similar areas of dwelling units. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within one inch (1") (25 mm) to six inches (6") (152 mm) below the structural members, and a maximum distance of fourteen inches (14") (356 mm) below the deck of the exterior balconies that are constructed of open wood joist construction. (4243)

903.3.1.2.2 Attics. Sprinkler protection shall be provided for attics. (4243)

903.3.1.2.3 Access. For the purpose of inspection, testing, or maintenance of NFPA 13R fire protection systems in R-1 and R-2 occupancies, there shall be provided, at the time of construction, an exterior access door on the side of the building next to the fire sprinkler riser of adequate size to allow for valves and gauges to be accessed, repaired, and viewed from the exterior for testing and maintenance purposes. The dimensions of the access door will be dependent upon the design of the riser and system devices but shall, in no case, require that service personnel must enter a private dwelling or garage to reach the riser for service and/or repair. (4243)

(U) Section 903.4 Sprinkler System Monitoring and Alarms is amended by revising Exception 2 to read as follows: (4243)

2. Buildings less than twelve thousand (12,000) square feet in total aggregate area, unless supervision is required by another provision in this Chapter or the Mesa Fire Code. For the purposes of this exception, Section 705 of this Chapter shall not apply. Note: All control valves on fire sprinkler systems that are not electronically supervised shall be locked in the open/normal position. (4243)

(V) Section 903.4.1 Signals is amended by changing the opening paragraph to read as follows: (4243)

903.4.1 Signals. Alarm, supervisory, and trouble signals shall be distinctly different and shall be automatically transmitted to an Underwriters Laboratory or Factory Mutual-listed central station, remote supervising station, or proprietary supervising station as defined in NFPA 72 or, when approved by the Fire Code official, shall sound an audible signal at a constantly attended station. (4243)

(The remainder of the Section is unchanged.) (4243)

(W) Section 904.11.2 System Interconnection shall be revised to read as follows: (4243)

904.11.2 System Interconnection. The actuation of the fire suppression system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual. Where resetting of the supply gas valve requires opening the valve cover, and the valve is located above the ceiling, the valve shall be readily accessible. (4243)

(X) Section 905 Standpipe Systems is amended by deleting Section 905.3.4.1 Hose and Cabinet and Section 905.5.3 Class II System to 1-inch hose entirely and by amending Section 905.8 Dry Standpipes to read as follows: (4243,4790)

905.8 Dry Standpipes. Dry standpipes shall not be installed, except where approved by the Fire Chief. (4243)
Section 907.2.10.1.2 Groups R-2, R-3, R-4, and I-1 is amended to read as follows: (4243)

907.2.10.1.2 Groups R-2, R-3, and I-1. Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, and I-1, regardless of occupant load at all of the following locations: (4243)

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms. (4243)

2. In each room used for sleeping purposes. (4243)

3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split-levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one (1) full story below the upper level. (4243)

Section 907.2.10.1.4 Groups R-3 Residential Care/Assisted Living Facilities and R-4. Multiple-station smoke alarm systems shall be installed and maintained throughout Groups R-3 residential care/assisted living facilities and R-4 regardless of occupant load except in bathrooms, kitchens, garages, or mechanical rooms. Fire sprinkler systems, where provided, shall alarm the multiple-station smoke alarm system. (4243)

Section 1004.1.1 Areas without fixed seating is amended by revising the exception as follows:

The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in table 1004.1.1. For areas without fixed seating, the occupant load shall not be less than that number determined by dividing the floor area under consideration by the occupant per unit of area factor assigned to the occupancy as set forth in Table 1004.1.1. Where an intended use is not listed in Table 1004.1.1, the Building Official shall establish a use based on a listed use that most nearly resembles the intended use. (4635)

EXCEPTION: Where approved by the Building Official, through the Code Modification Process, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load. (4635)

Section 1008.1.2 Door Swing is amended by revising Exception 4 to read as follows: (4243,4635)

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 and R-5, as applicable in the Mesa Administrative Code, Chapter 1. (4243,4635)

Section 1008.1.8 Door Operations is amended to read as follows: (4243,4635,4790)

1008.1.8 Door Operations. Except as specifically permitted by this Section, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. (4790)
1008.1.8.1 Hardware. Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate. (4790)

1008.1.8.2 Hardware Height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height. (4790)

Exception: access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock. (4790)

1008.1.8.3 Locks and Latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint. For required exterior exit doors, approved magnetic door locking shall comply with 1008.1.8.6. (4790)

2. In buildings in Occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
   2.1. The locking device is readily distinguishable as locked,
   2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: this door to remain unlocked when building is occupied. The sign shall be in letters 1 inch (25 mm) high on a contrasting background,
   2.3. The use of the key-operated locking device is revocable by the Fire Code Official for due cause. (4790)

3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware. (4790)

4. Doors from individual dwelling or sleeping units of Group R-1, R-2, R-3 and R-5 (not including residential care/assisted living facilities) occupancies having an occupant load of ten (10) or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or tool. (4243,4635)

5. Doors from individual dwelling or sleeping units of Group R-3 residential care/assisted living facilities and R-4 occupancies are permitted to be equipped with locks or latches, provided such devices are openable from the inside without the use of a key or tool and are mounted not more than forty-eight inches (48") (1,219 mm) above the finished floor. For required exterior exit doors, approved magnetic door-locking devices are permitted where tied to the fire alarm system and released upon activation of any fire detection or suppression device or loss of power. (4243)

1008.1.8.4 Bolt Locks. Manually operated flush bolts or surface bolts are not permitted. (4790)
Exceptions:

1. On doors not required for egress in individual dwelling units or sleeping units. (4790)

2. Where a pair of doors serve a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. (4790)

1008.1.8.5 Unlatching. The unlatching of any door or leaf shall not require more than one operation. (4790)

Exceptions:

1. Places of detention or restraint. (4790)

2. Where manually operated bolt locks are permitted by Section 1008.1.8.4. (4790)

3. Doors with automatic flush bolts as permitted by Section 1008.1.8.3, Exception 3. (4790)

4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1008.1.8.3, Exception 4. (4790)

1008.1.8.6 Delayed Egress Locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit. (4790)

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system. (4790)

2. The doors unlock upon loss of power controlling the lock or lock mechanism. (4790)

3. The door locks shall have the capability of being unlocked by a signal from the Fire Command Center. (4790)

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 n) is applied for 1 second to the release device. Initiation of the irreversible process shall activate a verbal messaging system in the vicinity of the door. This verbal message shall announce time remaining before door releases. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only. (4790)

Exception: where approved, a delay of not more than 30 seconds is permitted. (4790)

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: push until alarm sounds. Door can be opened in 15 [30] seconds. (4790)

6. Emergency lighting shall be provided at the door. (4790)

1008.1.8.7 Stairway Doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort. (4790)
Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side. (4790)

2. This section shall not apply to doors arranged in accordance with Section 403.12. (4790)

3. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the Fire Command Center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building. (4790)

1008.1.9 Panic and Fire Exit Hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width. (4790)

2. The maximum unlatching force shall not exceed 15 pounds (67 n). (4790)

Each door in a means of egress from a Group A or E occupancy having an occupant load of 50 or more and any Group H occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware. (4790)

Exception: a main exit of a Group A occupancy in compliance with Section 1008.1.8.3, Item 2. (4790)

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide that contain overcurrent devices, switching devices or control devices with exit access doors must be equipped with panic hardware and doors must swing in the direction of egress. (4790)

If balanced doors are used and panic hardware is required, the panic hardware shall be the push-pad type and the pad shall not extend more then one-half the width of the door measured from the latch side. (4790)

(DD) Section 1011 Exit Signs is amended by adding two new Subsections 1011.6 Floor Level Exit Signs and 1011.7 No Exit Signs at the end to read as follows: (4243,4635,4790)

1011.6 Floor Level Exit Signs. Where exit signs are required by Section 1011.1, additional approved low-level exit signs shall be provided in all corridors serving guest rooms in R-1 occupancies. Such low-level exit signs shall be internally or externally illuminated, photo luminescent, or self-luminous and shall be mounted with the bottom of the exit sign not less than six inches (6") (152 mm) nor more than eight inches (8") (203 mm) above the floor level. For exit doors, the exit sign shall be mounted on the door or adjacent to the door with the closest edge of the exit sign within four inches (4") (102 mm) of the door frame. (4243)

Exception: where all sleeping units on a floor have a direct means of egress to the exterior. (4790)

1011.7 No Exit Signs. Where a door is adjacent to, constructed similar to, or can be confused with a means of egress door, that door shall be identified with an approved sign that reads, "Not an Exit". The sign shall consist of letters having a principal stroke of not less than 0.75 inch (19.1mm) wide and at least 6 inches (152mm) high on a contrasting background. (4790)
Section 1019.2 Buildings with One Exit is amended as follows: (4243,4635)

1018.2 Buildings With One Exit. Only one (1) exit shall be required in buildings as described below: (4243)

1. Buildings described in Table 1019.2, provided that the building has not more than one (1) level below the first story above the grade plane. (4243,4635)

2. Buildings of R-3 and R-5 Occupancy not licensed as a care facility. (4243,4635)

3. Single-level buildings with the occupied space at the level of exit discharge provided that the story or space complies with Section 1015.1 as a space with one (1) means of egress. (4243,4635)

EXCEPTION: R-4 and I-1 occupancies for adult or child care facilities are not permitted to have only one (1) exit. (4243)

Section 1101 General is amended to read as follows: (4243)

Section 1101 General. (4243)

1101.1 Scope. The provisions of this Chapter shall control the design and construction of facilities for accessibility to physically disabled persons. (4243)

1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with the following: (4243)

1101.2.1 Public Entity Requirements. Public entity facilities as defined by State of Arizona Revised Statutes, Section 41-1492, shall comply with this Chapter, the ICC/ANSI A117.1, and the standards and specifications set forth in Title 41, Chapter 9, Article 8, Arizona Revised Statutes and its implementing rules, which incorporate 28 CFR Part 35, and 28 CFR 36 and the "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities" published by the U.S. Architectural and Transportation Barriers Compliance Board in 56 Federal Register 35455 (July 26, 1991), and such standards and specifications shall be made a part hereof as though fully set forth herein. Such standards and specifications shall apply to new construction and alterations and are not required in buildings or portions of existing buildings that do not meet the standards and specifications. (4243)

1101.2.2 Public Accommodations and Commercial Facilities Requirements. Public accommodations and commercial facilities as defined by State of Arizona Revised Statutes, Section 41-1492, shall comply with this Chapter, the ICC/ANSI A117.1, and the standards and specifications set forth in Title 41, Chapter 9, Article 8, Arizona Revised Statutes, and its implementing rules which incorporate the "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities" published by the U.S. Architectural and Transportation Barriers Compliance Board in 56 Federal Register 35455 (July 26, 1991), and such standards and specifications shall be made a part hereof as though fully set forth herein. Such standards and specifications shall apply to new construction and alterations commenced after September 30, 1992. (4243)
EXCEPTIONS: (4243)

1. This Chapter shall not apply to private clubs or establishments exempted from coverage under Title II of the Civil Rights Act of 1964 (42 United States Code Section 2000[a][e]). (4243)

2. This Chapter shall not apply to religious functional areas of religious facilities owned, operated, and maintained by religious organizations or entities controlled by religious organizations, including altar areas, baptismal fonts and areas, choir lofts, etc., but not including main assembly areas such as naves and sanctuaries. (4243)

1101.2.3. Where the requirements of this Chapter or the ICC/ANSI A117.1 are at variance from the requirements set forth in Title 41, Chapter 9, Article 8, Arizona Revised Statutes and its implementing rules, the State Statute and implementing rules shall govern. (4243)

1101.3 Provisions for Children. Facilities and areas of facilities intended primarily for occupancy by children ages three through twelve (3-12) shall be permitted to be designed and constructed as an equivalent facilitation in accordance with ADA guidelines for accessible design for children as promulgated in the Federal Register, Vol. 63, No. 8, Tuesday, January 13, 1998. Such equivalent facilitation shall be permitted without requiring approval of a modification. (4243)

1101.4 Copy of Laws and Standards. A copy of all laws, rules, guidelines, and standards cited by this Chapter shall be available in the office of the City Clerk in order to allow persons an adequate opportunity to be informed of the applicable requirements. (4243)

(GG) Chapter 13 Energy Efficiency is hereby adopted in its entirety. (4243, 5055)

(HH) Table 1804.2 is amended to read as follows:
# Allowable Foundation and Lateral Pressure

<table>
<thead>
<tr>
<th>Class of Materials</th>
<th>Allowable Foundation Pressure (PSF)(^D)</th>
<th>Lateral Bearing (PSF/F Below Natural Grade)(^D)</th>
<th>Lateral Sliding Coefficient of Friction(^A)</th>
<th>Lateral Sliding Resistance (PSF)(^B)</th>
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<tr>
<td>1. Crystalline Bedrock</td>
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<td>0.70</td>
<td>--</td>
</tr>
<tr>
<td>2. Sedimentary and Foliated Rock</td>
<td>4,000</td>
<td>400</td>
<td>0.35</td>
<td>--</td>
</tr>
<tr>
<td>3. Sandy Gravel and/or Gravel (GW and GP)</td>
<td>3,000</td>
<td>200</td>
<td>0.35</td>
<td>--</td>
</tr>
<tr>
<td>4. Sand, Silty Sand, Clayey Sand, Silty Gravel and Clayey Gravel (SW, SP, SM, SC, GM and GC)</td>
<td>1,500(^C)</td>
<td>150</td>
<td>0.25</td>
<td>--</td>
</tr>
<tr>
<td>5. Clay, Sandy Clay, Silty Clay, Clayey Silt, Silt and Sandy Silt (CL, ML, MH and CH)</td>
<td>1,500(^C)</td>
<td>100</td>
<td>--</td>
<td>130</td>
</tr>
</tbody>
</table>

For SI: 1 pound per square foot = 0.0479 KPA, 1 pound per square foot per foot = 0.157 KPA/M

A. Coefficient to be multiplied by the dead load.
B. Lateral sliding resistance value to be multiplied by the contact area, as limited by Section 1804.3
C. Where the Building Official determines that in-place soils with an allowable bearing capacity of less than 1,500 PSF are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.
D. An increase of one-third is permitted when using the alternate load combinations in Section 1605.3.2 that include wind or earthquake loads.

(4635)

(II) Section 2111 Masonry Fireplaces is amended by adding a new paragraph at the end of the section to read as follows: (4243)

2111.14 Fireplace Restrictions. Refer to the Mesa Mechanical Code, Section 927 for additional restrictions on masonry and factory-built fireplaces. (4243,4635)

(JJ) Chapter 21 Masonry is amended by adding a new Section 2114 Solid Waste Bin and Barrel Enclosures at the end of the chapter to read as follows:

2114 Solid Waste Bin and Barrel Enclosure. (4635)

Section 2114.1 General: Enclosures shall be designed and installed in compliance with Mesa Standard Details M62.1-M62.5. (4635)

(KK) Table 2902.1 Minimum number of required plumbing facilities is amended by deleting "1 Service Sink" from the "Other" column for use groups B and M. (4579,4635)
Section 2902.2 Separate facilities through Section 2904.4 Required Public Toilet Facilities are amended to read as follows:

2902.2 Separate Facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex. (4790)

EXCEPTIONS:

1. Separate facilities shall not be required for dwelling units and sleeping units. (4635)

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 20 or less. (4635)

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less. (4635)

4. Separate facilities shall not be required in F and S occupancies with 20 or less identified work stations. (4635)

2902.3 Number of Occupants of Each Sex. The required water closets, lavatories and showers or bathtubs shall be distributed equally between the sexes based on the percentage of each sex anticipated in the occupant load. The occupant load shall be composed of 50 percent of each sex, unless statistical data approved by the Building Official indicate a different distribution of the sexes. (4790)

2902.4 Required Public Toilet Facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. The accessible route to public facilities shall not pass through kitchens, storage rooms, closets or similar spaces. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall be either separate or combined employee and public toilet facilities. (4790)

2902.4.1 Location of Toilet Facilities in Occupancies Other Than Covered Malls. In occupancies other than covered malls, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m). (4790)

Exception: the location and maximum travel distances to required employee facilities in storage, factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved through the code modification process as described in Section 4-1-3. (4790)
2902.4.2 Location of Toilet Facilities in Covered Malls. In covered mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 300 feet (91 440 mm). In covered mall buildings, the required facilities shall be based on total square footage, and facilities shall be installed in each individual store or in a central toilet area located in accordance with this section. The maximum travel distance to the central toilet facilities in covered mall buildings shall be measured from the main entrance of any store or tenant space. In covered mall buildings, where employees' toilet facilities are not provided in the individual store, the maximum travel distance shall be measured from the employees' work area of the store or tenant space. (4790)

2902.4.3 Pay Facilities. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities. Required facilities shall be free of charge. (4790)

(MM) Section 3109.2 Definition is amended to read as follows: (4243,4579,4635)

3109.2 Definition. The following word and term shall, for the purposes of this Section and as used elsewhere in this Code, have the meaning shown herein. (4243)

SWIMMING POOLS: Any structure intended for swimming, recreational bathing, or wading that contains water over eighteen inches (18") (430 mm). This includes in-ground, aboveground, and on-ground pools; spas; and fixed-in-place wading pools. (4243)

(NN) Section 3109.3 Public Swimming Pools is amended to read as follows:

3109.3 Public and Semi-Public Swimming Pools. Public and semi-public swimming pools shall comply with the pool barrier requirements of the Maricopa County Health Department. (4243,4790)

(OO) Section 3109.4.1 Barrier Height and Clearances is amended to read as follows: (4243,4635)

3109.4.1 Barrier Height and Clearances. The top of the barrier shall be at least five feet (5') (1,525 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be two inches (2") (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four inches (4") (102 mm). (4243)

(PP) Section 3109.4.1.8 Dwelling Wall as a Barrier is amended to read as follows: (4243,4579,4635)
3109.4.1.8 Dwelling Wall as a Barrier. Where a wall of a dwelling serves as part of the barrier, one of the following shall apply: (4579)

1. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door. The alarm shall be installed in accordance with manufacturer’s installation instructions which shall be submitted to the Building Safety Director for approval prior to installation; or (4579)

2. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or (4579)

3. Other means of protection, such as self-closing doors with self-latching devices, approved by the Building Safety Director, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by subparagraph 1 or 2 above. Doors from garages shall be self-closing with self-latching devices. (4579)

(QQ) Section 3109.4.19 Pool Structure as Barrier is amended to read as follows:

3109.4.1.9 Pool Structure as Barrier. Where an aboveground pool structure with nonclimbable walls at least five feet (5') (1,525 mm) is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked, or removed to prevent access, or the ladder or steps shall be surrounded by a barrier which meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. Where the ladder or steps are secured, locked, or removed, any opening created shall not allow the passage of a four-inch- (4”) (102 mm) diameter sphere. (4243,4579)

(RR) Section 3109.6 shall be added at the end of this Chapter and shall read as follows: (4243,4635)

3109.6 Exceptions To Swimming Pool Enclosure Requirements. The Building Safety Director may grant exceptions to the requirements of Sections 3109.3 through 3109.5 above based on an application and a determination that the proposed alternative is at least as safe as the Code requirements. The determination of the Building Safety Director may be appealed to the Building Board of Appeals. (4243)

(SS) Section 3109.7 shall be added to the end of this Chapter and shall read as follows: (4243,4635)

3109.7 Retroactivity. The enclosure requirements contained in this Section shall apply to existing conditions in accordance with the following: (4243)

3109.7.1(A). An existing swimming pool lawfully constructed prior to April 20, 1998, but which does not conform to these regulations, shall become subject to these regulations as a result of any alteration, addition, or expansion of a dwelling unit or guest room having access to such pool, that increases the livable floor area and contains door openings providing direct access to the pool area. (4243)
3109.7.2(B). The enclosure requirements specified in Section 3109.3 and 3109.4 Subsections 2(B) and 2(C) of this Section shall not apply to any existing subdivision perimeter fence, golf course view fence, or similar boundary fence lawfully constructed prior to April 20, 1998, in accordance with an approved Planned Area Development (PAD), or Development Master Plan (DMP). (4243)

(TT) Section 3109.8 shall be added at the end of this Chapter and shall read as follows: (4243,4635)

3109.8 Abatement of Public Nuisance. Failure to maintain a completely enclosed, fenced, or walled swimming pool or other contained body of water with a protective enclosure as specified in this Section adequate to prevent unauthorized ingress, and/or operational self-closing, self-latching gates, shall be deemed a nuisance and dangerous to the public health, safety, and welfare. The owner, owners, manager, tenant, and lessees shall jointly and severally be responsible to abate said nuisance. (4243)

(UU) Section 3201 General is amended to read as follows: (4243,4635)

Section 3201 General. (4243)

Section 3201.1 Scope. The provisions of the City of Mesa Code, Chapter 9-2 shall govern encroachments into the public right-of-way. (4243)

(VV) Section 3202 Encroachments is deleted entirely. (4243,4635)

(WW) Section 3406.1 Conformance is amended by adding a table at the end of the section to read as follows:
Table 3406.1 Occupancy Comparison

The following Occupancy Comparison Table is added as a guide for determining the appropriate change of occupancy or use classification for an existing building that has a legal certificate of occupancy based on prior City adopted codes. (4635)

(BUILDING CODE YEAR AND OCCUPANCIES)

<table>
<thead>
<tr>
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</thead>
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<td>A1,A2, A2.1</td>
<td>A1,A2</td>
<td>A1,A2</td>
<td>A1,A2</td>
<td>A1,A2</td>
</tr>
<tr>
<td>A2</td>
<td>A2.1,A3, A2 (Food/Drink occupancy under 50)</td>
<td>A1, A2,A2.1,A3, B2 (Food/Drink occupancy under 50)</td>
<td>A1, A2,A2.1,A3, B2 (Food/Drink occupancy under 50)</td>
<td>A1, A2,A2.1,A3, B2 (Food/Drink occupancy under 50)</td>
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<td>A3</td>
<td>A2.1, A3</td>
<td>A2.1,A3</td>
<td>A2.1,A3</td>
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<td>A4</td>
<td>A2.1, A3</td>
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<td>E</td>
<td>E1,E2,E3</td>
<td>E1,E2,E3</td>
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<td>F1</td>
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<td>B4 (Power Plants), B2(Printing Plants)</td>
<td>B4 (Power Plants), B2(Printing Plants)</td>
<td>B4 (Power Plants), B2(Printing Plants)</td>
<td>B4 (Power Plants), B2(Printing Plants)</td>
</tr>
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<td>F2</td>
<td>F2</td>
<td>B4 (Ice plants / Factories), B2 Factories/Work shops</td>
<td>B4 (Ice plants / Factories), B2 Factories/Work shops</td>
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<td>H-7</td>
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<td>H5</td>
<td>H-6</td>
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</tr>
<tr>
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<td>R1/ R3 Greater than 16</td>
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<tr>
<td>I2</td>
<td>I1,2, I2 &amp; I3</td>
<td>I1,2, I3</td>
<td>I1,2, I3</td>
<td>I1,2, I3</td>
<td>I1,2, I3</td>
</tr>
<tr>
<td>I3</td>
<td>I3</td>
<td>I3 (Jail)</td>
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</tr>
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<td>I4</td>
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<td>E3 &amp; R3</td>
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<td>Adult Care Facility</td>
<td>R3 &amp; R4</td>
<td>R3 &amp; R4</td>
<td>R3 &amp; R4</td>
<td>R3 &amp; R4</td>
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</tr>
<tr>
<td>Child Care Facility</td>
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<td>R3 &amp; E3</td>
<td>R3 &amp; E3</td>
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</tr>
<tr>
<td>M</td>
<td>M</td>
<td>B2 Retail Stores, Paint Stores</td>
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<tr>
<td>R1</td>
<td>R1(Hotel) &amp; R3 (Lodging) - Transit</td>
<td>R1 (Hotel/Motel), R3 Lodging - Boarding House Transient</td>
<td>R1 (Hotel/Motel), R3 Lodging - Boarding House Transient</td>
<td>R1 (Hotel/Motel), R3 Lodging - Boarding House Transient</td>
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</tr>
<tr>
<td>R2</td>
<td>R1(Convent/ Monasteries)</td>
<td>R1(Convent/ Monasteries)</td>
<td>R1(Convent/ Monasteries)</td>
<td>R1(Convent/ Monasteries)</td>
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</tr>
<tr>
<td>Not Transit</td>
<td>R3 Lodging Boarding House Transient</td>
<td>R3 Lodging Boarding House Transient</td>
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<tr>
<td>I2</td>
<td>R4 Non Ambulatory</td>
<td>R4 Non Ambulatory</td>
<td>R4 Non Ambulatory</td>
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<td>R4</td>
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<td>R4 Ambulatory</td>
<td>R4 Ambulatory</td>
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<tr>
<td>S1 Moderate-hazard storage</td>
<td>H4 &amp; H5 (Aircraft Repair Hangars), S1, S3 Aircraft Hanger - Parking, S5</td>
<td>B1 (Service Stations), B3 &amp; H5 (Aircraft Hangers) H4(Repair Garages), B2 Storage</td>
<td>B1 (Service Stations), B3 &amp; H5 (Aircraft Hangers) H4(Repair Garages), B2 Storage</td>
<td>B1 (Service Stations), B3 &amp; H5 (Aircraft Hangers) H4(Repair Garages), B2 Storage</td>
<td>B1 (Service Stations), B3 &amp; H5 (Aircraft Hangers) H4(Repair Garages), B2 Storage</td>
</tr>
<tr>
<td>S2 Low-hazard storage</td>
<td>S2, S4(Parking Garages) &amp; S5</td>
<td>B3 (Parking Garage)</td>
<td>B3 (Parking Garage)</td>
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<tr>
<td></td>
<td>B4 (Cold Storage / Storage noncombustible)</td>
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<tr>
<td>U</td>
<td>U1 &amp; U2</td>
<td>M1, M2</td>
<td>M1, M2</td>
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<td>* IRC/R5</td>
<td>R3</td>
<td>R3 (Dwellings)</td>
<td>R3 (Dwellings)</td>
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</tr>
</tbody>
</table>

(XX) Chapter 35 Referenced Standards is amended by modifying the reference standard for ANSI Publications, B31.3 Process Piping to the 2001 edition. (4243,4635)

(YY) Chapter 35 Referenced Standards is amended by deleting NFPA Standards 651-98 and adding/revising the following standards. All other standards to remain: (4243,4635)

NFPA Standards (4243,4635)

11A-02 Medium- and High-Expansion Foam Systems; (4243)

61-02 Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities; (4243)

110-05 Emergency and Standby Power Systems; (4790)

232-00 Standard for the Protection of Records; (4243)

484-02 Standard for Combustible Metals, Metal Powders, and Metal Dusts; (4243)

(ZZ) Chapter 35 referenced standards is amended by replacing UL 727-98 with UL 727-06 and add UL 731-95, and replacing IECC – 06 with IECC – 09. (5055)

(AAA) Section E 108 Bus Stops of Appendix E is deleted entirely. (4243, 4635, 5055)
Section J101.1 Scope is amended to read as follows: (4243, 4635, 5055)

J101.1 Scope. The provisions of this Section apply to grading, excavation, and earthwork construction, including fills and embankments. Where conflicts occur between the technical requirements of this Section and the soils report, the soils report shall govern. All grading operations covered by this Section shall be performed in accordance with applicable Federal, State, and County regulations and City of Mesa ordinances. Applicable requirements may include, but are not limited to, National Pollution Discharge Elimination System, Arizona Pollutant Discharge Elimination System Regulations, and Mesa City Codes 8-2 (Particulate Pollution Sources) and 8-5 (Stormwater Pollution Control). (4243, 4635)

Section J103.1 Permits Required is amended to read as follows: (4243, 4635, 5055)

J103.1 Permits Required. Except as exempted in this Subsection, no grading shall be performed without first obtaining a permit from the Building Safety Director. (4243)

EXCEPTIONS: A grading permit shall not be required for the following: (4243)

1. Excavation for construction of a building or structure permitted under this Chapter and Title 4, Chapter 1, Mesa Administrative Code. (4243)

2. Cemetery graves. (4243)

3. Refuse disposal sites controlled by other regulations. (4243)

4. Excavations for wells or trenches for utilities. (4243)

5. Mining, quarrying, excavating, processing, or stockpiling rock, sand, gravel, aggregate, or clay controlled by other regulations, provided such operations do not affect the lateral support of, or significantly increase stresses in soil on adjacent properties. (4243)

6. Exploratory excavations performed under the direction of a registered design professional. (4243)

The above exemptions do not apply when the property is subject to the Desert Uplands Development Standards. Exemption for permit requirements under this Section shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Chapter or any other laws or ordinances of the City of Mesa. (4243)

Section J104.2 Site Plan Requirements shall be amended to read as follows: (4243, 4635, 5055)

J104.2 Site Plan Requirements. In addition to the provisions of Title 4, Chapter 1, Mesa Administrative Code, a grading plan shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work, and show in detail that it complies with the requirements of this Chapter. In cases where contours are insufficient to convey the existing and proposed grading elevations, supplemental "spot" elevations shall be provided on the site plan. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of this Chapter. (4243)
Section J104.3 Soils Report shall be amended to read as follows: (4243, 4635, 4790, 5055)

J104.3 Soils Report. A soils report prepared by registered geologist or professional engineer shall be provided which shall identify the nature and distribution of existing soils; conclusions and recommendations for grading procedures; soil design criteria for any structures or embankments required to accomplish the proposed grading; and, where necessary, slope stability studies, and recommendations and conclusions regarding site geology, including earth fissuring as identified by the Arizona Geological Survey (AZGS).

EXCEPTION: A soils report is not required under the following instances: (4243)

1. Storm water retention/detention basins. (4243)

2. Where the Building Safety Director determines that the nature of the work applied for is such that a report is not necessary. (4243)

Section J106.1 Maximum Slope is amended by adding the following at the end of the Exceptions: (4243, 4635, 5055)

3. Excavations within the City of Mesa public rights-of-way and easements shall comply with the Maricopa Association of Government's specifications and details as amended by the City of Mesa. (4243)

Section J109 Drainage and Terracing shall be amended to read as follows: (4243, 4635, 5055)

J109.1 General. Unless otherwise recommended by a registered design professional, drainage facilities and terracing shall be provided in accordance with the requirements of this Section. (4243)

EXCEPTION: Drainage facilities and terracing need not be provided where the ground slope is not steeper than three (3) horizontal to one (1) vertical (thirty-three percent [33%]). (4243)

J109.2 Terraces. Terraces at least six feet (6') (1,829 mm) in width shall be established at not more than thirty-foot (30') (9,144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris. Suitable access shall be provided to allow for cleaning and maintenance. Where more than two (2) terraces are required, one (1) terrace, located at approximately mid-height, shall be at least twelve feet (12') (3,658 mm) in width. Swales or ditches shall be provided on terraces. They shall have a minimum gradient of twenty (20) horizontal to one (1) vertical (five percent [5%]) and shall be paved with concrete not less than three inches (3") (76 mm) in thickness, or with other materials suitable to the application. They shall have a minimum depth of twelve inches (12") (305 mm) and a minimum width of five feet (5') (1,524 mm). A single run of swale or ditch shall not collect runoff from a tributary area exceeding thirteen thousand five hundred (13,500) square feet (1,256 m²) (projected) without discharging into a down drain. (4243)

EXCEPTION: Terraces, including terraces with retaining walls, located on property subject to the "Desert Uplands Development Standards" area shall comply with Section 9-6-5(B) of the Mesa City Code. (4243)
J109.3 Interceptor Drains. Interceptor drains shall be installed along the top of cut slopes receiving drainage from a tributary width greater than forty feet (40'), measured horizontally. They shall have a minimum depth of one foot (1') (305 mm) and a minimum width of three feet (3') (915 mm). The slope shall be approved by the Building Safety Director, but shall not be less than fifty (50) horizontal to one (1) vertical (two percent [2%]). Discharge from the drain shall be accomplished in a manner to prevent erosion and shall be approved by the Building Safety Director. (4243)

J109.4 Drainage Across Property Lines. Drainage across property lines shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of nonerosive down drains or other devices. Drainage shall comply with Section 9-6 or 9-8 of the Mesa City Code, as appropriate, and shall be subject to the prior approval of the City Engineer. (4243)

(HHH) Section 507 Unlimited Area Buildings shall be modified by adding a new Subsection 507.12 Alternative Compliance at the end to read as follows: (5055)

507.12 Alternative Compliance. Where approved by the Building Safety Director through the code modification process as established in Section 4-1-3, the 60 foot yard requirements of Section 507.2 and 507.3 may be provided through a properly executed "No Build" agreement with an adjoining property owner or other manner acceptable to the Building Safety Director. (4790)

(III) Table 601 shall be amended to read as follows: (5055)

---

### Table 601

<table>
<thead>
<tr>
<th>Building Element</th>
<th>Type I</th>
<th>Type II</th>
<th>Type III</th>
<th>Type IV</th>
<th>Type V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A&lt;sup&gt;E&lt;/sup&gt;</td>
<td>B</td>
<td>A&lt;sup&gt;E&lt;/sup&gt;</td>
</tr>
<tr>
<td>Structural Frame&lt;sup&gt;A&lt;/sup&gt;</td>
<td>3&lt;sup&gt;B&lt;/sup&gt;</td>
<td>2&lt;sup&gt;B&lt;/sup&gt;</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Bearing Walls Exterior&lt;sup&gt;G&lt;/sup&gt;</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Bearing Walls Interior</td>
<td>3&lt;sup&gt;B&lt;/sup&gt;</td>
<td>2&lt;sup&gt;B&lt;/sup&gt;</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Nonbearing Walls and Partitions Exterior</td>
<td></td>
<td></td>
<td>See Table 602</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonbearing Walls and Partitions Interior</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Floor Construction Including Supporting Beams and Joists</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Roof Construction Including Supporting Beams and Joists</td>
<td>1.5&lt;sup&gt;C&lt;/sup&gt;</td>
<td>1&lt;sup&gt;C,D&lt;/sup&gt;</td>
<td>1&lt;sup&gt;C,D&lt;/sup&gt;</td>
<td>0&lt;sup&gt;C,D&lt;/sup&gt;</td>
<td>1&lt;sup&gt;C,D&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

(4790)
For SI: 1 foot = 304.8 mm.

A. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.

B. Roof supports: fire-resistance ratings of structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

C. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

D. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.

E. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.

F. Not less than the fire-resistance rating required by other sections of this code.

G. Not less than the fire-resistance rating based on fire separation distance (see Table 602). (4790)

(JJJ) Section 912 Fire Department Connections is amended by deleting Subsection 912.5 Backflow Prevention entirely. (4790, 5055)

(KKK) Chapter 9 Fire Protection Systems is amended by adding a new Section 913 at the end to read as follows: (5055)

Section 913

Firefighter Breathing Air Replenishment Systems (FBAR)

913.1 FBAR Systems Required. An FBAR system shall be provided in new buildings and structures meeting the following criteria:

913.1.1 Buildings and structures five (5) floors or more above grade or high rise buildings as defined by this code; or (4790)

913.1.2 Underground buildings and structures, or components thereof, totaling ten thousand (10,000) square feet or more that are either more than two (2) floors below grade or more than thirty (30) feet below grade. (4790)

913.2 FBAR Systems Installation. FBAR systems shall comply with Section 915 of the Mesa Fire Code. (4790)

(LLL) Section 1009.11 Stairway to Roof is amended by adding a new Subparagraph 1009.11.3 at the end to read as follows: (5055)

1009.11.3 Ladder Access to Roof. For buildings less than three stories in height, maintain a flat area at grade from the building wall at a minimum of both faces of two building corners. The purpose of this flat area shall be to provide ladder access to the roof by a flat area out from the base of the wall that is a minimum of a 15° projection from the roof eave or top of the parapet to a vertical line at grade plus four feet. (4790)

4-2-2: PENALTY CLAUSE: (4243,4635)

Any person, firm, or corporation who shall violate any of the provisions of this Chapter of the Mesa City Code as amended shall be subject to all penalties and provisions of Section 4-1-9. (4243,4635)