



BUILDING CODE PLAN SUBMITTAL CHECKLIST

Building code checklist for construction. **Note: All references comply with 2024 International Building Code (IBC), 2024 International Plumbing Code (IPC), 2024 International Residential Code (IRC), International Existing Building Code (IEBC), International Energy Conservation Code (IECC), 2024 International Fire Code (IFC), Mesa Administrative Code, and ICC A117.1-2017 including City of Mesa amendments.**

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Review Key

“M –” = City of Mesa Amendment

Administrative

- ☐ 1. Provide **detailed** project narrative.
- ☐ 2. Identify site address.
- ☐ 3. Provide vicinity map showing areas surrounding the site.
- ☐ 4. Provide project site plan.
- ☐ 5. The following appendices to the 2024 IBC are adopted by reference:
 - a. **Appendix C** - Group U - Agricultural Buildings.
 - b. **Appendix E** - Supplemental Accessibility Requirements.
 - c. **Appendix I** - Patio Covers.
 - d. **Appendix J** – Grading.
- ☐ 6. **Note:** [IBC Sections 101.4 through 116.5](#) are deleted in their entirety. References to them shall comply with [Mesa Administrative Code](#) (Mesa City Code, Title 4, Chapter 1).
- ☐ 7. **Existing Building.** A building erected prior to the date of adoption of the appropriate code, or one for which a Certificate of Occupancy has been issued for at least one year. ([M-IBC Chapter 2](#))

General

- ☐ 1. Identify whether equipment shown is new, existing, or relocated.
- ☐ 2. Provide a coordinated sheet index matching all sheets in the plan set.
- ☐ 3. Provide code data block on cover sheet including:
 - ☐ Occupancy classification
 - ☐ Construction type
 - ☐ Building height
 - ☐ Building area
 - ☐ Fire protection systems
 - ☐ Occupant load

Chapter 3 Occupancy Classification

- ☐ 1. Identify occupancy classification(s). (IBC Chapter 3)
- ☐ 2. Identify accessory occupancies. (IBC 508.2)
- ☐ 3. Identify non-separated or separated mixed occupancy design. (IBC 508.3; 508.4)
- ☐ 4. Identify hazardous materials quantities and control areas. (IBC 307; 414)
- ☐ 5. Identify incidental uses and required separations. (IBC 509)
- ☐ 6. All dwelling unit main entry doors shall allow occupant to have a view of the immediate outside area without opening the door.
 - a. A door viewer with a 180° minimum field of view or through-window view may be provided. (M-IBC 310.7.1)

Chapter 4 Special Detailed Requirements

- ☐ 1. Covered mall buildings shall comply with IBC 402.
- ☐ 2. High-rise buildings shall comply with IBC 403.
- ☐ 3. Atriums shall comply with IBC 404.
- ☐ 4. Underground buildings shall comply with IBC 405.
- ☐ 5. Motor vehicle-related occupancies shall comply with IBC 406.
- ☐ 6. Institutional occupancies shall comply with IBC 407 and 408.
- ☐ 7. Stages and platforms shall comply with IBC 410.
- ☐ 8. Special amusement buildings shall comply with IBC 411.
- ☐ 9. Aircraft-related occupancies shall comply with IBC 412.
- ☐ 10. Hazardous materials control areas shall comply with IBC 414.
- ☐ 11. Ambulatory care facilities shall comply with IBC 422.

Chapter 5 Building Height and Area

- ☐ 1. Provide building height and area calculations. (IBC Chapter 5)
- ☐ 2. Provide allowable area calculations including frontage increase. (IBC 506)
- ☐ 3. Identify building height limitations. (IBC Table 504.3)
- ☐ 4. Identify number of stories limitations. (IBC Table 504.4)
- ☐ 5. Identify frontage increases if applicable. (IBC 506.3)

Chapter 6 Construction Type

- ☐ 1. Identify construction type. (IBC Chapter 6)
- ☐ 2. Identify fire-resistance ratings for structural elements. (IBC Table 601)
- ☐ 3. Identify exterior wall ratings. (IBC Table 705.5)

Chapter 7 Fire and Smoke Protection

- ☐ 1. Identify fire-resistance rated assembly design numbers for all rated assemblies. (IBC 703)
- ☐ 2. Provide continuity details for rated assemblies. (IBC 705.6)
- ☐ 3. Provide fire wall continuity through concealed spaces. (IBC 706)
 - a. Provide fire wall horizontal continuity. (IBC 706.5)
 - b. Provide fire wall vertical continuity. (IBC 706.6)
- ☐ 4. Fire partitions shall have a 1-hour minimum fire resistance.
 - a. Provide 2-hour minimum fire resistance for buildings without automatic sprinkler system. (M-IBC 708.3)
- ☐ 5. Provide shaft enclosure details. (IBC 713)
- ☐ 6. Provide through-penetration protection details. (IBC 714)
- ☐ 7. Provide joint protection systems. (IBC 715)
- ☐ 8. Show fire damper and smoke damper locations. (IBC 717.2)
- ☐ 9. Show fireblocking and draftstopping locations. (IBC 718)

Chapter 9 Fire Protection Systems

- ☐ 1. Provide automatic sprinkler system where required. (IBC 903; M-IBC Chapter 9)
- ☐ 2. An existing building or portion thereof undergoing a change of occupancy shall provide an automatic sprinkler system, provided that the new or proposed use or occupancy is less hazardous, based on life and fire risk, than the existing use or occupancy in accordance with M-IFC 102.3. (M-IBC 903.2.3)
- ☐ 3. All additions to existing buildings shall have an automatic fire protection system throughout the existing building and addition. (M-IBC 903.2.4)
- ☐ 4. Identify sprinkler hazard classification. (NFPA 13)
- ☐ 5. Provide fire alarm system where required. (IBC 907)

- ☐ 6. All fire sprinkler designs shall have a 10% (pressure) safety margin. (M-IBC 903.3.10)
- ☐ 7. 2-inch minimum exterior sprinkler piping may be used in lieu of freeze protection. (M-IBC 903.3.12)
- ☐ 8. Valves controlling water supply for the following shall be electrically supervised by a listed fire alarm control unit: (M-IBC 903.4.1)
 - a. Automatic sprinkler systems.
 - b. Pumps.
 - c. Tanks.
 - d. Water levels and temperatures.
 - e. Critical air pressures and waterflow switches on all sprinkler systems.

Chapter 10 Means of Egress

- ☐ 1. Identify occupant load per space. (IBC 1004)
- ☐ 2. Provide egress capacity calculations. (IBC 1005)
- ☐ 3. Provide exit separation distances. (IBC 1007)
- ☐ 4. Identify accessible means of egress. (IBC 1009)
- ☐ 5. Identify horizontal exits where used. (IBC 1026)
- ☐ 6. Provide exit discharge details. (IBC 1028)
- ☐ 7. Provide emergency escape openings where required. (IBC 1031)

Chapter 11 Accessibility

- ☐ 1. Provide accessible route. (IBC 1104)
- ☐ 2. Provide accessible entrances. (IBC 1105)
- ☐ 3. Provide accessible parking. (IBC 1106)
- ☐ 4. Accessibility provisions shall comply with ICC A117.1-2017. Where conflicts exist, Arizona accessibility statutes shall govern. (M-IBC 1101.2)

Chapter 12 Interior Environment

- ☐ 1. Ventilation shall comply with IBC 1202.
- ☐ 2. Temperature control shall comply with IBC 1203.
- ☐ 3. Lighting shall comply with IBC 1204.

- ☐ 4. Toilet room finish materials shall comply with [IBC 1210](#).

Chapter 14 Exterior Walls

- ☐ 1. Provide water-resistive barrier. ([IBC 1403](#))
- ☐ 2. Provide exterior wall envelope weather protection. ([IBC 1402.2](#))
- ☐ 3. Identify exterior wall covering materials and attachments. ([IBC 1404](#))

Chapter 15 Roof Assemblies

- ☐ 1. Provide roof slope and drainage design. ([IBC 1502](#))
- ☐ 2. Provide overflow drainage where required. ([IBC 1502.2](#))
- ☐ 3. Identify roof covering classification. ([IBC 1505](#))

Chapter 16 Structural Design

- ☐ 1. Provide structural design criteria. ([IBC 1603](#))
- ☐ 2. Provide live load design. ([IBC Table 1607.1](#))
- ☐ 3. Provide wind design criteria. ([M-IBC 1609.3](#))
 - a. The basic design wind speed, V, for use in the design of Risk Category II buildings and structures shall be obtained from [IBC Figures 1609.3\(1\)](#) and [1609.3\(2\)](#) or 105 mph.
- ☐ 4. Provide rain load calculations. ([IBC 1611](#))
- ☐ 5. Provide flood design where applicable. ([IBC 1612](#))
- ☐ 6. Provide seismic design criteria. ([IBC 1613](#))

Chapter 17 Special Inspections

- ☐ 1. Provide special inspection schedule.
 - a. Completed special inspection certificate shall be submitted prior to permit issuance. ([IBC Chapter 17](#); [M-IBC Chapter 17](#))
- ☐ 2. Provide structural observation statement where required.
 - a. Structural observations shall be provided by the registered design professional (P.E) responsible for structural design. ([M-IBC 1704.6](#))
- ☐ 3. Provide electrical observation statement where required.
 - a. Electrical observations shall be provided by the registered design professional (P.E) responsible for electrical design. ([M-IBC 1704.7](#))

- ☐ 4. Provide structural steel inspection requirements. (IBC 1705.2)
- ☐ 5. Provide deep foundation inspection requirements where applicable. (IBC 1705.7)
- ☐ 6. Provide plumbing special inspections where required. Additionally, include grease interceptors, fuel gas systems, or other applicable systems. (M-IBC 1705.21)
- 7. Provide electrical special inspections for the following: (M-IBC 1705.22)
 - a. Equipment rated 1000 amperes minimum or operating at 600 volts minimum.
 - b. Transformers rated 100 kVA minimum single-phase or 300 kVA minimum three-phase.
 - c. Conductors and feeders supplying equipment rated 1000 amperes minimum or operating at 600 volts minimum.
 - d. Emergency and standby power systems including generators, transfer switches, fire pumps, ventilation systems, and associated conductors.
 - e. Selective coordination where required.

Chapter 29 Plumbing Fixtures

- ☐ 1. Provide plumbing fixture calculations. (IBC Table 2902.1)
 - a. For businesses and mercantile classifications with an occupant load of 100 or fewer, a service sink shall not be required. (M-IBC Table 2902.1 – Footnote e.)
- ☐ 2. Provide separate toilet facilities where required.
 - a. Separate facilities may not be required for occupant loads less than 25. (M-IBC 2902.2)
- ☐ 3. Provide public restroom access. (IBC 2902.3)
- ☐ 4. Provide travel distance to public toilet facilities. (IBC 2902.3.3; 2902.3.4)
- ☐ 5. Drinking fountains shall comply with IBC 2902.5.
 - a. Drinking fountains may not be required for occupant loads less than 50. (M-IBC 2902.6)
- ☐ 6. 2-inch minimum in diameter underground nonmetallic water piping shall be installed with insulated copper tracer wire or other approved conductor located adjacent to piping.
 - a. Access shall be provided to tracer wire or tracer wire shall terminate above ground at each end of nonmetallic piping.

- b. Tracer wire size shall be 14 AWG minimum and insulation type shall be suitable for direct burial. ([M-IRC P2603.6; P3001.4](#))
- ☐ 7. Provide required backflow prevention at potential cross connections, kitchen equipment, carbonators, med equipment, dental vacuum pumps, etc. ([IPC 608](#))
 - a. Backflow devices shall be reviewed and approved before installation.
 - b. For more information, visit [backflow prevention](#) or contact (480) 644-6462 or backflow@mesaaz.gov.
- ☐ 8. Grease interceptors shall be reviewed and approved before installation.
 - a. For more information, visit [Industrial Pretreatment](#) or contact (480) 644-2484 or industrialpretreatment@mesaaz.gov.

Chapter 30 Elevators and Conveying Systems

- ☐ 1. Note on plans, “Elevators and conveying systems comply with IBC Chapter 30, applicable State of Arizona elevator regulations and ANSI A17.1”.
- ☐ 2. Provide 1 minimum elevator capable of accommodating an ambulance stretcher (24- by 84-inch) in buildings four or more stories above or below grade. ([IBC 3002.4](#))
- ☐ 3. Provide elevator machine rooms, machinery spaces, and control rooms with independent cooling capable of maintaining temperatures not greater than 90 °F. ([M-IBC 3005.2](#))
- ☐ 4. Provide elevator hoistway door protection where required. ([M-IBC 3006.2](#))
- ☐ 5. Where corridors are required to be fire-resistance rated, elevator hoistway openings into such corridors shall be protected. ([M-IBC 3006.3; 3006.4](#))
- ☐ 6. Provide elevator hoistway opening protection details where required. ([M-IBC 3006.4](#))
- ☐ 7. Identify elevator car signage and accessibility provisions required for accessible elevators. ([IBC Chapter 11; ICC A117.1](#))
- ☐ 8. Escalators, moving walks, conveyors, and similar systems shall comply with [IBC Chapter 30](#) and [ANSI A17.1](#).

Existing Buildings

- ☐ 1. Where toilet rooms cannot be made accessible, one accessible single-user toilet room or one accessible family or assisted-use toilet room shall be constructed in accordance with [IBC 1110.2.1](#).

- a. Toilet room shall be on the same floor and in the same area as existing toilet rooms.
 - b. At the inaccessible toilet rooms, directional signs indicating location of nearest accessible toilet room shall be provided. ([M-IEBC 306.7.12](#))
- ☐ 2. Change of Occupancy. Use [M-IEBC Table 1001.1](#) as a guide to determine the appropriate Change of Occupancy or use classification for an existing building that has a legal Certificate of Occupancy based on City adopted Codes.
- ☐ 3. Exterior alterations to a historic building shall be exempted from IECC provisions.
 - a. New construction within designated historic districts shall be subject to IECC provisions. ([M-IEBC 1201.6](#))

ADA 2017 A117.1 Expanded

General

- ☐ 1. Provide a complete accessibility compliance plan in accordance with [IBC Chapter 11](#) and [ICC A117.1-2017](#).
- ☐ 2. Identify all accessible routes, entrances, restrooms, and elements.
- ☐ 3. Where floor plans lack sufficient clarity, provide enlarged details.

Accessible Route

- ☐ 1. Provide an accessible route connecting accessible parking, public way, building entrance, and all accessible spaces. ([IBC 1104.1; 1104.2](#))
- ☐ 2. Accessible route slope shall be 5% maximum unless designed as a ramp. ([A117.1 Section 403.3](#))
- ☐ 3. Accessible route width shall be 36 inches minimum. ([A117.1 Section 403.5](#))

Doors and Entrances

- ☐ 1. Provide door maneuvering clearances at all required accessible doors. ([A117.1 Section 404.2.3](#))
- ☐ 2. Provide 32-inch minimum clear opening width. ([A117.1 Section 404.2.3](#))
- ☐ 3. Thresholds shall not exceed 1/2-inch. ([A117.1 Section 404.2.4](#))
- ☐ 4. Door hardware shall be operable without tight grasping, pinching, or twisting of the wrist. ([A117.1 Section 404.2.6](#))

Restrooms

- ☐ 1. Provide compliant turning space or T-turn within restroom. (A117.1 Section 304)
- ☐ 2. Accessories (mirrors, dispensers, etc.) shall be easily accessible. (A117.1 Section 308)
- ☐ 3. Grab bar locations and dimensions shall comply with A117.1 Section 604.5.
- ☐ 4. Fixture clearances for water closets and lavatories shall comply with A117.1 Section 604 and 606.
- ☐ 5. Provide accessible lavatory with knee and toe clearance. (A117.1 Section 606)

Drinking Fountains

- ☐ 1. Drinking fountains shall comply with high or low configuration requirements. (A117.1 Section 602)
- ☐ 2. Provide clear floor space and knee or toe clearance. (A117.1 Section 602.2.1)

Signage

- ☐ 1. Provide tactile exit and room identification signage. (A117.1 Section 703)
- ☐ 2. Provide mount signage at compliant height and location. (A117.1 Section 703)

Parking

- ☐ 1. Provide required number of accessible parking spaces, including van accessible spaces. (IBC 1106)
- ☐ 2. Provide compliant aisles and slopes not exceeding 2%. (A117.1 Section 502)

Counters and Services Areas

- ☐ 1. Accessible portions of sales or service counters shall comply with A117.1 Section 904.
- ☐ 2. Provide clear floor space for forward or parallel approach. (A117.1 Section 904.3.2; 904.3.3)

Protruding Objects

- ☐ 1. Objects with leading edges between 27 and 80 inches above floor shall not protrude more than 4 inches into circulation paths. (A117.1 Section 307.2)

Employee Work Areas

- ☐ 1. Provide accessible approach, entry, and exit to employee work areas. ([IBC 1104.3](#))
- ☐ 2. Common use spaces within work areas shall be ADA compliant.

Vertical Accessibility

- ☐ 1. All stories and mezzanines shall be accessible unless exception is justified. ([IBC 1104.4](#))

Ramps (if applicable)

- ☐ 1. Ramps shall have an 8% maximum slope and a 30-inch maximum rise per run. ([A117.1 Section 405.2; 405.6](#))
- ☐ 2. Provide handrails, landings, and edge protection. ([A117.1 Section 405.7; 405.8; 405.9](#))

Detectable Warnings

- ☐ 1. Provide truncated dome detectable warnings at locations such as curb ramps and hazardous vehicular areas. ([A117.1 Section 705](#))

M-IBC Table 1001.1 Occupancy Comparison (Building Code year and Occupancies)

2018	2006	2003	1994	1988	1985	1982	1979
A1	A1	A1	A1, A2, A2.1	A1, A2	A1, A2	A1, A2	A1, A2
A2	A2	A2	A2.1, A3	A1, A2, A2.1, A3, B2 (Food/Drink Occupancy Under 50)	A1, A2, A2.1, A3, B2 (Food/Drink Occupancy Under 50)	A1, A2, A2.1, A3, B2 (Food/Drink Occupancy Under 50)	A1, A2, A2.1, A3, B2 (Food/Drink Occupancy Under 50)
A3	A3	A3	A2.1, A3	A2.1, A3	A2.1, A3	A2.1, A3	A2.1, A3
A4	A4	A4	A2.1, A3	A4	A4	A4	A4
		A5	A4	A4	A4	A4	A4
B	B	B	B (Food/Drink Occupancy Under 50)	B2 (Offices, Police/Fire) B (Food/ Drink Occupancy Under 50)	B2 (Offices, Police/Fire) B (Food/Drink Occupancy Under 50)	B2 (Offices, Police/Fire) B (Food/Drink Occupancy Under 50)	B2 (Offices, Police/Fire) B (Food/Drink Occupancy Under 50)
E	E	E	E1, E2, E3	E1, E2, E3	E1, E2, E3	E1, E2, E3	E1, E2, E3
F1	F1	F1	F1	B4 (Power Plants) B2 (Printing Plants)	B4 (Power Plants) B2 (Printing Plants)	B4 (Power Plants) B2 (Printing Plants)	B4 (Power Plants) B2 (Printing Plants)
F2	F2	F2	F2	B4 (Ice Plants/Factories) B2 Factories/Work Shops	B4 (Ice Plants/Factories) B2 Factories/Work Shops	B4 (Ice Plants/Factories) B2 Factories/Work Shops	B4 (Ice Plants/Factories) B2 Factories/Work Shops
H1	H1	H1	H1	H1	H1	H1	H1
H2	H2	H2	H2	H2, B2 (Wood-working)	H2, H3, B2 (Wood-working)	H2, H3, B2 (Wood-working)	H2, H3, B2 (Wood-working)
H3	H3	H3	H3	H3	None	None	None
H4	H4	H4	H7	H7	None	None	None

2018	2006	2003	1994	1988	1985	1982	1979
H5	H5	H5	H6	H6	H6	None	None
I-1	I-1	I-1	R1/R3 Greater Than 16	None	None	None	None
I-2	I-2	I-2	I-1.2, I-2, I-3	I-1, I-2, I-3	I-1, I-2, I-3	I-1, I-2, I-3	I-1, I-2, I-3
I-3	I-3	I-3	I-3	I-3 (Jail)	I-3 (Jail)	I-3 (Jail)	I-3 (Jail)
I-4	I-4	I-4 Day Care Facilities	E3 & R3	E3 & R3	E3 & R3	E3 & R3	E3 & R3
I-4	I-4	Adult Care Facility	R3 & R4	R3 & R4	R3 & R4	R3 & R4	R3 & R4
I-4	I-4	Child Care Facility	R3 & E3	R3 & E3	R3 & E3	R3 & E3	R3 & E3
M	M	M	M	B2 Retail Stores, Paint Stores	B2 Retail Stores, Paint Stores	B2 Retail Stores, Paint Stores	B2 Retail Stores, Paint Stores
R1	R1	R1	R1 (Hotel)	R1 (Hotel/Motel)	R1 (Hotel/Motel)	R1 (Hotel/Motel)	R1 (Hotel/Motel)
			R3 Lodging/Boarding House/ Transient	R3 Lodging/Boarding House/ Transient	R3 Lodging/Boarding House/ Transient	R3 Lodging/Boarding House/ Transient	R3 Lodging/Boarding House/ Transient
R2	R2	R2		R1 (Convent/ Monasteries)	R1 (Convent/ Monasteries)	R1 (Convent/ Monasteries)	R1 (Convent/ Monasteries)
R3	R3	R3	R3	R3	R3	R3	R3
I-2	I-2	I-2	R4 Nonambulatory	R4 Non- ambulatory	R4 Non- ambulatory	R4 Non- ambulatory	R4 Non- ambulatory
R4	R4	R4	R4 Ambulatory	R4 Ambulatory	R4 Ambulatory	RA Ambulatory	R4 Ambulatory

2018	2006	2003	1994	1988	1985	1982	1979
S1	S1	S1 Moderate Hazard Storage	H4 & H5 H5 (Aircraft Repair Hangars) S1, S3 Aircraft Hangar Parking S5	B1 (Service Stations), B3 & H5 (Aircraft Hangars) H4 (Repair Garages) B2 Storage	B1 (Service Stations), B3 & H5 (Aircraft Hangars) H4 (Repair Garages) B2 Storage	B1 (Service Stations), B3 & H5 (Aircraft Hangars) H4 (Repair Garages) B2 Storage	B1 (Service Stations), B3 & H5 (Aircraft Hangars) H4 (Repair Garages) B2 Storage
S2	S2	S2 Low- hazard Storage	S2, S4 (Parking Garages) & S5	B3 (Parking Garages)	B3 (Parking Garages)	B3 (Parking Garages)	B3 (Parking Garages)
				B4 (Cold Storage/ Storage Noncombustible)	B4 (Cold Storage/ Storage Noncombustible)	B4 (Cold Storage/ Storage Noncombustible)	B4 (Cold Storage/ Storage Noncombustible)
U	U	U	U1, U2	M1, M2	M1, M2	M1, M2	M1, M2
*IRC/R5	*IRC/R5	*IRC/R5	R3	R3 (Dwellings)	R3 (Dwellings)	R3 (Dwellings)	R3 (Dwellings)