

CODE SECTION/REQUIREMENTS	IRC	Multiplex' Appendix	IBC
Scope	One and Two family dwellings or townhouses	3 to six dwelling units in a single structure	Greater than six dwelling units - determined by multiple factors per IBC
Use	Single family residence	Apartments (based on R-2 occupancy requirements per IBC)	Apartments (R-2 occupancy)
Total Floor Area (Max)	Unlimited	8,000 square feet of BUILDING area	Greater than 8,000 sf - determined PER STORY by multiple factors per IBC
Number of Stories (Max)	3	3	Greater than 3 - determined by multiple factors per IBC
Building Height (Max)	Unlimited	60 feet	Greater than 60 feet - determined by multiple factors per IBC
Units per story (Max)	NA (individual multistory dwellings only)	4 dwelling units per story	More than 4 dwelling units per story permitted, depending on the number of exits provided
Fire-resistance (General)	Per IRC R302. Requirements apply to exterior walls, townhouse separation walls and duplex separation walls (Separation walls in accordance with ASTM E119 or UL 263, or per IBC 703.2.2).	In accordance with ASTM E119 or UL 263, per IBC 703.2.2, or per IBC 721. Requirements apply to exterior walls, unit separation walls and floor/ceiling construction and common-use walls and floor/ceiling construction.	Per IBC 703, and in accordance with ASTM E119 or UL 263. Requirements apply to exterior walls, unit separation walls and floor/ceiling assemblies, and common-use walls and floor/ceiling assemblies.
Opening Protectives	Requirements apply to garage/dwelling separation and openings between duplexes.	In accordance with NFPA 252 or UL 10C. Requirements apply openings in corridor walls, common-use walls, exit passageways, and interior and exterior exit stairways.	In accordance with IBC Section 716 and NFPA 80. Requirements apply to openings in exterior walls subject to fire separation distance, openings in corridor walls, common-use walls, exit passageways, and interior and exterior exit stairways.
Penetration protection	Penetrations protected in accordance with IRC Section R302.4.	Penetrations protected in accordance with IRC Section R302.4.	Penetrations protected in accordance with IBC Section 714.
Smoke and Draft Control	NA	Smoke and draft control assemblies in accordance with UL 1784	Smoke and draft control assemblies in accordance with UL 1784. Requirements determined by multiple factors per IBC.
Fire Separation Distance	Up to one-hour, in accordance with IRC Tables R302.1(1) (unsprinklered) and R302.1(2) (sprinklered).	Up to one-hour, In accordance with IRC Table 302.1(1) (unsprinklered table used to introduce percentage of openings allowance)	Up to one-hour, in accordance with IBC Table 705.5.
Dwelling Unit Separation - walls and floor/ceiling	Separation walls - one-hour for duplex (1/2 hr if sprinklered), one or two-hour for townhouse floor-ceiling - One hour for stacked duplex (1/2 hour if sprinklered)	One-hour fire-resistance rating for walls AND floor/ceiling construction.	1/2 hour or one-hour fire partitions per IBC 420 and 708 for separation walls. One-hour horizontal separation per IBC 420 and 711.
Common Use Area Separation	1/2" or 5/8" type X GWB for shared accessory rooms in duplexes	One-hour fire-resistance rating for separation of common use areas from remainder of building	Determined by multiple factors per IBC
Automatic Sprinkler System	Not required for one and two-family dwellings, and townhouses containing no more than four townhouse units. (WA State amendment. Model code requires NFPA 13D or P2904 sprinklers.)	Required - NFPA 13R in accordance with IBC 903.2.8	Required - NFPA 13R up to 4 stories and 60 feet height. NFPA 13 above these limits. In accordance with IBC 903.2.8.
Portable Fire Extinguishers	Not required.	Required in each dwelling unit. Minimum rating of 2-A:10-B:C	Required. Locations depend on allowances per IBC 906.1. 1-A:10-B:C required in some cases.
Means of Egress	A minimum of one egress door required per dwelling unit.	A minimum of one means of egress required from each dwelling unit, and from each story where the means of egress is shared by dwelling units.	For three story buildings, a minimum of one means of egress required from each dwelling unit, and from each story where means of egress is shared by dwelling units. Two or more exits are required for buildings four or more stories. Additional requirements determined by multiple factors per IBC for larger buildings and/or mixed use buildings.
Means of Egress Continuity	Continuous from dwelling unit to required egress door without passing through garage.	Continuous from dwelling unit to public way	Continuous from dwelling unit to public way and consisting of three separate and distinct parts: exit access, exit and exit discharge.

Means of Egress Sizing	36 inches minimum width. 7 feet minimum height - 6'-8" for bathrooms, kitchens, etc and stairways.	36 inches minimum width 7 feet minimum height, 6'-8" for stairways.	36 to 44 inches minimum width, but determined by multiple factors per IBC. 7'-6" minimum height, 6'-8" for stairways.
Travel Distance	NA	125 feet from farthest point of a story to an interior or exterior exit stairway, or to an exterior exit door.	125 foot common path of travel from spaces and stories with a single exit. 250 foot exit access travel distance.
Means of Egress Door Dimensions	32" clear width; side-hinged	32" clear width; side-hinged	32" clear width; side-hinged
Means of Egress Door Fire Protection	Garage/dwelling separation and openings between duplexes requires 1/3 hour rated or solid/steel, self-closing doors.	1/3 hour rated doors required when they open into corridors or for two story condition. 3/4 hour rated doors required for openings into exterior exit stairways. One-hour rated doors required for openings into interior exit stairways and exit passageways.	Requirements determined by multiple factors per IBC.
Means of Egress Illumination	1 footcandle at center of stairway treads and landings.	1 footcandle at walking surface. 10 footcandles at walking surface when stairway is in use	1 footcandle at walking surface. 10 footcandles at walking surface when stairway is in use. Additional requirements apply as determined by multiple factors per IBC.
Guards	36 inches minimum in height. 34 inches minimum	42 inches minimum in height for means of egress. 36 inches permitted within individual dwelling units.	42 inches minimum in height. 36 inches permitted within individual dwelling units.
Corridor Dimensions	NA	36" minimum width. 20 feet maximum in length	Determined by multiple factors per IBC.
Corridor Protection	NA	1/2 hour rating for corridor walls. 1/3 hour rating for openings	1/2 hour rating for corridor walls. 1/3 hour rating for openings
Exterior Egress Balcony Dimensions	NA	Same dimensions as corridors	Same dimensions as corridors
Exterior Egress Balcony Protection	NA	Same protection as corridors	Same protection as corridors
Exit Stairway Width	36 Inches	36 inches	Determined by multiple factors per IBC.
Exit Stairway Riser Height	7 3/4 inches maximum	7 inches maximum. 7 3/4 inches permitted within individual dwelling units.	7 inches maximum. 7 3/4 inches permitted within individual dwelling units.
Exit Stairway Tread Depth	10 inches minimum	11 inches minimum. 10 inches permitted within individual dwelling units.	11 inches minimum. 10 inches permitted within individual dwelling units.
Exit Stairway Landings	Landing width shall match the stairway width. Minimum depth is 3 feet. Landings required at top and bottom of each stairway	3 foot minimum width and depth. Landings required at top and bottom of each stairway	Landing width shall match the stairway width. Depth equal to width of stairway or 4 feet, whichever is less. Landings required at top and bottom of each stairway
Interior Exit Stairway Construction	NA	One-hour fire-resistance rating	One-hour fire barriers per IBC 1023.2 up to four stories.
Interior Exit Stairway Opening Protection	NA	One-hour fire-resistance rating	One-hour fire-resistance rating for one-hour fire barriers.
Exterior Exit Stairway Construction	NA	One-hour fire-resistance rating	One-hour fire barriers per IBC 1027.6 (and 1023.2) up to four stories. Other requirements determined by multiple factors per IBC.
Exterior Exit Stairway Opening Protection	NA	3/4 hour fire-resistance rating	3/4 hour fire-resistance rating
Ramp Slope	1:12 maximum slope. 1:8 slope permitted in certain situations.	1:12 maximum slope. 1:48 maximum cross-slope. 30 inch maximum ramp run rise.	1:12 maximum slope. 1:48 maximum cross-slope. 30 inch maximum ramp run rise.
Ramp Dimensions	36 inch minimum ramp width. Landings required top and bottom. Minimum width required to be same as width of ramp. 36 inch minimum depth.	36 inch minimum ramp width. 48 inch minimum ramp width when part of accessible route. Landings required top and bottom - 60 inch minimum both directions.	Width determined by multiple factors per IBC. Landings required top and bottom. Landing width same as width of ramp. 48 inch minimum ramp width when part of an exterior accessible route. 36 inch minimum depth - 60 inch minimum if ramp serves as part of an accessible route.
EV Charging Infrastructure	One dedicated 40A circuit required for each dwelling unit (WA State Amendment)	20% of spaces shared on-site parking shall be EV Ready spaces - 40A dedicated circuits required.	Considering total parking spaces, 10% EV Charging Stations, 25% EV Ready, 10% EV Capable (WA State Amendment).

EV Charging Infrastructure - Accessible Spaces	NA	One or two EV Ready space required depending on number of accessible spaces are required.	10% of accessible parking spaces shall be EV Charging Stations, and an additional 10% shall be EV Ready (WA State Amendment).
Electrical Rooms	NA	Rooms sized to simultaneously provide 40A charge to all EV ready spaces.	Required to simultaneously provide 40A charge to all EV Charging Stations, EV Ready parking spaces and EV Capable parking spaces. Specific requirements for electrical rooms per IBC Chapter 10 may also apply (WA State Amendment).
Accessibility	Per IRC R320, townhomes with four or more dwelling or sleeping units must comply with R-3 occupancy requirements for accessibility per IBC Chapter 11	In accordance with R-2 occupancy requirements for accessibility per IBC Chapter 11	In accordance with R-2 occupancy requirements for accessibility per IBC Chapter 11
Elevators	In accordance with ASME A17.1/CSA B44. Where part of an accessible route, compliance with IBC Chapter 11 applies. Gurney-sized elevator cab not required.	In accordance with ASME A17.1/CSA B44. Where part of an accessible route, compliance with IBC Chapter 11 applies. Gurney-sized elevator cab not required.	In accordance with ASME A17.1/CSA B44 and IBC Chapter 30 (Where part of an accessible route, IBC Chapter 11 is referenced per Chapter 30). Gurney-sized elevator cab required for all R occupancies (WA State amendment).
Platform Lifts	In accordance with ASME A18.1	In accordance with ASME A18.1	In accordance with ASME A18.1
Habitable Attics	Permitted per IRC R326	Not permitted	Permitted - requirements determined by multiple factors per IBC.
Structural Provisions - Lateral Design	Registered design professional required where structure does not comply with prescriptive requirements in IRC.	Registered design professional required where structure does not comply with prescriptive requirements in IRC, and for multiplex greater than 2 stories in SDC D2	Residential design performed per the IBC requires a registered design professional.