

CODE SECTION/REQUIREMENTS

Scope

Use

Total Floor Area (Max)

Number of Stories (Max)

Building Height (Max)

Units per story (Max)

Fire-resistance (General)

Opening Protectives

Penetrations

Smoke and Draft Control

Fire Separation Distance

Dwelling Unit Separation - walls and floor/ceiling

Common Use Area Separation

Automatic Sprinkler System

Portable Fire Extinguishers

Means of Egress

Means of Egress Continuity

IRC

One and Two family dwellings or townhouses

Single family residence

Unlimited

3

Unlimited

NA (individual multistory dwellings only)

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).

Requirements apply to garage/dwelling separation and openings between duplexes.

Penetrations in accordance with IRC Section R302.4.

Draftstopping required per R302.12.

Up to one-hour, in accordance with IRC Tables R302.1(1) (unsprinklered) and R302.1(2) (sprinklered).

Separation walls - one-hour for duplex, one or two-hour for townhouse
floor-ceiling - NA

NA

Not required for one and two-family dwellings, and townhouses containing no more than four townhouse units.

Not required.

A minimum of one egress door required per dwelling unit.

Continuous from dwelling unit to public way

Means of Egress Sizing	36 inches minimum width. 7 feet minimum height - 6' 8" for bathrooms, kitchens, etc and stairways.
Travel Distance	NA
Means of Egress Door Dimensions	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.
Means of Egress Illumination	1 footcandle at center of stairway treads and landings.
Guards	36 inches minimum in height
Corridor Dimensions	NA
Corridor Protection	NA
Exterior Egress Balcony Dimensions	NA
Exterior Egress Balcony Protection	NA
Exit Stairway Width	36 Inches
Exit Stairway Riser Height	7 3/4 inches maximum
Exit Stairway Tread Depth	10 inches minimum
Exit Stairway Landings	Landing width shall match the stairway width. Minimum depth is 3 feet. Landings required at top and bottom of each stairway
Interior Exit Stairway Construction	NA
Interior Exit Stairway Opening Protection	NA
Exterior Exit Stairway Construction	NA
Exterior Exit Stairway Opening Protection	NA
Ramp Slope	1:12 maximum slope. 1:8 slope permitted in certain situations.
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.

EV Charging Infrastructure	One dedicated 40A circuit required for each dwelling unit
EV Charging Infrastructure - Accessible Spaces	NA
Electrical Rooms	NA
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
Elevators	In accordance with ASME A17.1/CSA B44. Where part of an accessible route, compliance with IBC Chapter 11 applies.
Platform Lifts	In accordance with ASME A18.1
Habitable Attics	Permitted per IRC R326
Structural Provisions - Lateral Design	Registered design professional required where not in compliance with conventional framing requirements.

Multiplex' Appendix

3 to six dwelling units in a single structure

Apartments (based on R-2 occupancy requirements per IBC)

8,000 square feet

3

60 feet

4 dwelling units per story

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 and common-use walls and floor/ceiling.

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.

Penetrations in accordance with IRC Section R302.4.

Assemblies in accordance with UL 1784

Up to one-hour, In accordance with IRC Table 302.1(1)

One-hour fire-resistance rating for walls AND floor/ceiling assemblies

One-hour fire-resistance rating

Required - NFPA 13R in accordance with IBC 903.2.8

Required in each dwelling unit. Minimum rating of 2-A:10-B:C

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.

Continuous from dwelling unit to public way

36 inches minimum width
7 feet minimum height

125 feet

32" clear width; side-hinged
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 exist stairways and exit passageways.
1 footcandle at walking surface. 10 footcandles at walking surface when stairway is in use

42 inches minimum in height for means of egress. 36 inches permitted within individual dwelling units.
36" minimum width. 20 feet maximum in length
1/2 hour rating for corridor walls. 1/3 hour rating for openings

Same dimensions as corridors
Same protection as corridors
36 inches
7 inches maximum. 7 3/4 inches permitted within individual dwelling units.
11 inches minimum. 10 inches permitted within individual dwelling units.
3 foot minimum width and depth. Landings required at top and bottom of each stairway

One-hour fire-resistance rating
One-hour fire-resistance rating

One-hour fire-resistance rating

3/4 hour fire-resistance rating
1:12 maximum slope. 1:48 maximum cross-slope. 30 inch maximum ramp run rise.
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.

20% of spaces shared on-site parking shall be EV Ready spaces -
40A dedicated circuits required.

One or two EV Ready space required depending on number of
accessible spaces are required.

Rooms sized to simultaneously provide 40A charge to all EV
ready spaces.

In accordance with R-2 occupancy requirements for
accessibility per IBC Chapter 11

In accordance with ASME A17.1/CSA B44. Where part of an
accessible route, compliance with IBC Chapter 11 applies.

In accordance with ASME A18.1
Not permitted

Registered design professional required for multiplex greater
than 2 stories in SDC D2

IBC

Greater than six dwelling units - determined by multiple factors per IBC

Apartments (R-2 occupancy)

Greater than 8,000 sf - determined by multiple factors per IBC

Greater than 3 - determined by multiple factors per IBC

Greater than 60 feet - determined by multiple factors per IBC

More than 4, depending on the number of exits provided
Per IBC 703, and in accordance with ASTM E119 or UL 263.
Requirements apply to exterior walls, unit separation walls and floor/ceiling, and common-use walls and floor/ceiling.

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.

Penetrations in accordance with IBC Section 714.

Assemblies in accordance with UL 1784. Requirements determined by multiple factors per IBC.

Up to one-hour, in accordance with IBC Table 705.5.

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.

Determined by multiple factors per IBC

Required - NFPA 13R up to 4 stories and 60 feet height.

NFPA 13 above these limits. In accordance with IBC

903.2.8.

Required. Locations depend on allowances per IBC 906.1.

1-A:10-B:C required in some cases.

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.

Additional requirements determined by multiple factors per IBC for larger buildings and/or mixed use buildings.

Continuous from dwelling unit to public way and consisting of three separate and distinct parts: exit access, exit and exit discharge.

36 to 44 inches minimum width, but determined by multiple factors per IBC.

125 foot common path of travel from spaces and single exit stories.

250 foot exit access travel distance

32" clear width; side-hinged

Requirements determined by multiple factors per IBC.

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.

42 inches minimum in height

Determined by multiple factors per IBC.

1/2 hour rating for corridor walls. 1/3 hour rating for openings

Same dimensions as corridors

Same protection as corridors

Determined by multiple factors per IBC.

7 inches maximum. 7 3/4 inches permitted within individual dwelling units.

11 inches minimum. 10 inches permitted within individual dwelling units.

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

One-hour fire barriers per IBC 1023.2 up to four stories.

One-hour fire-resistance rating for one-hour fire barriers.

One-hour fire barriers per IBC 1027.6 (and 1023.2) up to four stories. Other requirements determined by multiple factors per IBC.

3/4 hour fire-resistance rating

1:12 maximum slope. 1:48 maximum cross-slope. 30 inch maximum ramp run rise.

Width determined by multiple factors per IBC. Landings required top and bottom. Landing width same as width of ramp. 36 inch minimum depth - 60 inch minimum if ramp serves as part of an accessible route.

Considering total parking spaces, 10% EV Charging Stations, 25% EV Ready, 10% EV Capable.

10% of accessible parking spaces shall be EV Charging Stations, and an additional 10% shall be EV Ready.

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. In accordance with R-2 occupancy requirements for accessibility per IBC Chapter 11

In accordance with ASME A17.1/CSA B44 and IBC Chapter 30.

In accordance with ASME A18.1

Permitted - requirements determined by multiple factors per IBC.

Residential design performed per the IBC requires a registered design professional.