# PART 1

**R101.2 Scope.** The provisions of the *International Residential Code for One- and Two-Family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings, *adult family homes*, and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

## Exceptions:

1. *Multiplex* buildings shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-Family Dwellings* except as modified by appendix XX.

## SECTION R202 DEFINITIONS

**[RB] BUILDING.** Any one- or two-family *dwelling*, ~~or~~ *townhouse*, or *multiplex*, or portion thereof, used or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, or any *accessory structure*.

**[RB] MULTIPLEX.** A building containing three to six *dwelling units* consolidated into a single structure with common walls and floors and a functional primary street entrance, or a building of up to three stories containing up to six *dwelling units* consolidated into a single structure.

# PART 2

**APPENDIX XX**

**MULTIPLEX BUILDINGS**

## User note:

**About this appendix:** *Appendix XX is intended to provide special requirements that in addition to this code, apply to multiplex buildings while maintaining life safety and public health, in an effort to provide more affordable construction of housing.*

## SECTION XX101 GENERAL

**XX101.1 Scope.** *Multiplex* buildings meeting the following conditions are permitted to be designed in accordance with the *International Residential Code* as modified by this appendix. Multiplex buildings are subject to all of the following conditions:

* 1. There shall be no interior stairs or corridors, except when located completely within an individual *dwelling* unit.
  2. Use of [any portion of] the building is limited to residential (apartment) use only, with no common-use areas.
  3. The total floor area of the building shall not exceed 8,000 square feet.
  4. The building shall not exceed 3 stories above *grade plane* and shall not exceed 60 feet in height.

**Exception.** *Mezzanines* and *lofts* are permitted in accordance with sections R314 and R315.

A *multiplex* building not complying with all of the above conditions shall be designed in accordance with the *International Building Code*. Unless otherwise specified, *multiplex* buildings designed using this appendix shall comply with the provisions of the *International Fire Code* for Group R- 2 (apartment) occupancies*.* For provisions, methods, or materials that are not provided herein, they shall be evaluated in accordance with the *International Building Code* for Group R-2 (apartment) occupancies.

**XX101.2 Modifications.** Local jurisdictions are permitted to amend or supplement the provisions of this appendix following the procedure outlined in WAC 51-04-035 to address regional needs or hazards, subject to consistency with the intent of the IRC.

## SECTION XX103

**FIRE PROTECTION FEATURES**

**XX102.1 *Dwelling unit separation*.** *Dwelling units* in *multiplex* buildings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating in accordance with one of the following:

1. The prescriptive fire resistance-rated assemblies in Section 721 of the International Building Code.
2. Where tested in accordance with ASTM E119, UL 263.
3. Where established by an analytical method in accordance with Section 703.2.2 of the *International Building Code*.

**XX102.1.1 Continuity.** Fire-resistance-rated floor/ceiling assemblies separating dwelling units shall extend to and be tight against the *exterior wall*, and fire resistance-rated wall assemblies separating dwelling units shall extend from the foundation to the underside of the roof sheathing.

**XX102.1.2 Supporting construction.** Floor/ceiling assemblies separating dwelling units shall be supported by construction having an equal or greater fire-resistance rating.

**XX102.1.3 Openings.** Openings in walls and floor/ceiling assemblies separating *dwelling units* shall not be permitted. Duct and air transfer openings between *dwelling units* shall not be permitted.

**XX102.1.4 Penetrations.** Penetrations of fire resistance-rated wall or floor/ceiling assemblies separating dwelling units shall be protected in accordance with Section R302.4.

**XX102.2 Automatic sprinkler system.** *Multiplex* Buildings shall be equipped throughout with an NFPA 13R automatic sprinkler system in accordance with Section 903.2.8 of the *International Building Code*.

**XX102.3 Portable fire extinguishers**. Portable fire extinguishers having a minimum rating of 1-A:10-B:C shall be provided in each *dwelling unit* of a *multiplex building*.

**XX102.4 Fire Department Access and Water Supply**. Fire department access and water supply shall comply with the locally adopted fire code. Alternative materials, design, or methods are subject to approval by the fire code official.

## SECTION XX103 MEANS OF EGRESS

**XX103.1 *Multiplex Egress.*** *Multiplex* buildings shall be provided with a means of egress in accordance with this section in addition to the requirements in Section R318.

**XX103.1.1 Egress configuration.** The means of egress shall provide a continuous and unobstructed access to the public way. Each *dwelling* unit shall have a separate means of egress directly to the exterior of the building at *grade*, an egress balcony, an *open- ended corridor*, or an *exterior exit stair*.

**XX103.1.2 Wall separation.** Exterior egress balconies, *open-ended corridors*, and *exterior exit stairways* shall be separated from dwelling units by wall assemblies having not less than a ½ hour fire-resistance rating. Doors shall have a 20-minute fire protection rating and shall be self-closing.Windows shall have a 20-minute fire protection rating.

**Exception:** Separation is not required where the exterior egress balcony is served by not less than two stairways, and a dead-end travel condition does not require travel past an unprotected opening to reach a stairway.

**XX103.1.3 Width.** Egress balconies and *open-ended corridors* shall be not less than 36 inches in width.

**XX103.1.4 Means of egress illumination.** Means of egress illumination shall be provided from the exterior of the *dwelling unit* to the *public way.* The means of egress illumination level under normal power shall be not less than 1 footcandle (11 lux) at the walking surface. Along *exit access stairways*, exit stairways, and at their required landings, the illumination level shall not be less than 10 footcandles (108 lux) at the walking surface when the stairway is in use.

**XX103.1.5 Slip-resistant surface.** The means of egress from the dwelling unit to the public way shall have a slip-resistant surface and be securely attached.

**XX103.1.6 Egress balconies.** Balconies used for egress purposes shall conform to this section in addition to the requirements in Section R318.3.

**XX103.1.6.1 Openness.** The long side of an egress balcony shall be not less than 50 percent open, and the open area above the guards shall be so distributed as to minimize the accumulation of smoke or toxic gases.

**XX103.1.7 Open-ended corridor.** *Open-ended corridors* shall be permitted to have an exterior stairway or ramp at only one end.

**XX103.1.8 Exterior exit stairways.** *Exterior exit stairways* and ramps serving as an exit component in a means of egress system shall comply with the requirements of this section.

**XX103.1.8.1 Open side.** *Exterior exit stairways* and ramps serving as an element of a required means of egress shall be open on not less than one side, except for required structural columns, beams, handrails, and guards. An open side shall have not less than 35 square feet (3.3 m2) of aggregate open area adjacent to each floor level and the level of each intermediate landing. The required open area shall be located not less than 42 inches (1067 mm) above the adjacent floor or landing level.

**XX103.1.8.2 Side yards.** The open areas adjoining *exterior exit stairways* or ramps shall be either *yards*, *courts*, or *public ways*. The remaining sides are permitted to be enclosed by the exterior walls of the building.

**XX103.1.9 Maintenance.** The means of egress shall be maintained in a manner that does not reduce the number of exits or the minimum width of the means of egress to less than required by this appendix.

## SECTION XX104

**PARKING REQUIREMENTS**

**XX104.1 On-site parking.** Where provided, on-site parking shall comply with this section.

**XX104.1.1 Electrical vehicle charging infrastructure.** EV charging infrastructure shall be provided in accordance with Section 429 of the *International Building Code* for Group R occupancies.

**XX104.1.2 Accessible parking spaces.** Accessible parking spaces shall be provided in accordance with Section 1106 of the *International Building Code* for Group R-2 occupancies.

## SECTION XX105 ACCESSIBILITY

**XX105.1 Scope.** Where there are four or more *dwelling units* in a single structure, the provisions of Chapter 11 of the *International Building Code* shall apply. *Multiplex* buildings shall be considered a Group R-2 (apartment) occupancy for the purpose of accessibility requirements.

## SECTION XX106

**ELEVATORS AND PLATFORM LIFTS**

**XX106.1 Elevators and platform lifts.** Where provided, elevators and platform lifts shall be constructed in accordance with Section R323 except as indicated in this section.

**XX106.1.1 Elevators.** Elevators installed in *multiplex* buildings shall comply with Chapter 30 of the *International Building Code*.

**Exception.** Elevators located within an individual *dwelling unit*.

## SECTION XX107 HABITABLE ATTICS

**XX107.1 General.** *Habitable attics* are not permitted in *multiplex* buildings.

Additional questions/comments not addressed above:

**GENERAL COMMENTS:**

* Proposal does not address attached multiplex buildings. Needs either prohibition or requirements for fire rated separations plus any other limitations (maximum number of attached buildings?)
* Proposal does not address structural issues. Braced wall line & panel provisions in IRC may not be appropriate if braced wall panels are offset. Probably OK if walls stack. Area limitation may help.
* Proposal does not deal with soundproofing between units. See IBC 1206, IRC Appendix BG. Should this be added? Not adopted in WAC 51-51. Is not a life-safety issue, but livability. If added, may affect seismic loading (weight of lightweight concrete or gypcrete on floors).

**SPECIFIC COMMENTS:**

* XX101.1, Item 3. Origin of 8000 sf?
* XX101.1, last paragraph, last sentence. “For provisions, methods, or materials that are not provided herein, they shall be evaluated in accordance with the *International Building Code* for Group R-2 (apartment) occupancies.” Does this contradict first sentence of the section (build per IRC as modified by appendix)?
* XX101.2. “…subject to consistency with the intent of the IRC.” What is intended by this? There is likely to be differences of opinion as to what is the “intent of the IRC.” Clarify?
* XX103.1.4. Since this is supposed to be a prescriptive code, will there be a need to clarify “when the stairway is in use” or specify locations for motion detectors?
* XX103.1.7. Does the open-ended corridor still need to be open at both ends? If not, this essentially changes the definition of “open-ended corridor,” which may be confusing. If a 3-sided corridor is not fire separated from the stairway, does that make the “corridor” actually a part of the stair (which is covered in XX103.1.1)?
* XX103.1.8.2. Do we need to specify a minimum width for the side yard? Or are we assuming the fire separation distances in Table 302.1(1) will take care of that? Note that Table 302.1(2) only applies to sprinklered townhouses and one/two-family dwellings. If want to use these reduced fire separation distances, will need to specify that they are OK for multiplex.
* XX103.1.8.2 refers to “the remaining sides….” Clarify what “remaining sides” this is referring to.