

For new R-2 dwellings, the intent of the code is for all units to have the capability to add visible notification if needed for a particular tenant. This is different from the R-1/I-1 requirement where there is a table with specific numbers of units to have visuals installed. The commentary to 907.5.2.3.3.1 discusses the "capacity" options.

2021 IBC 907.5.2.3.3 Group R-2.

In Group R-2 occupancies required by [Section 907](#) to have a fire alarm system, each *story* that contains *dwelling units* and *sleeping units* shall be provided with the capability to support future visible alarm notification appliances in accordance with [Chapter 11](#) of [ICC A117.1](#). Such capability shall accommodate wired or wireless equipment.

❖ Group R-2 occupancies with a fire alarm system are required to have the capability to support visual alarm notification appliances in accordance with [Chapter 11](#) of [ICC A117.1](#). This requirement has been in the code, and the language is intended to provide more specific guidance as to what is meant by "capability." Note that this requirement includes all dwelling and sleeping units, not just those classified as either Type A or B. [Sections 1106.2](#) through [1106.4.4](#) of [ICC A117.1](#) address smoke and fire alarm requirements as they pertain to accessible communication features. More specifically, [Section 1106.2](#) states that where unit smoke detection is provided, it shall provide audible notification in compliance with NFPA 72. [Section 1106.3](#) focuses on buildings where fire alarm systems are provided. If a fire alarm system is provided in the building, [ICC A117.1](#) requires that the wiring be extended to a point within the unit in the vicinity of the smoke detection system. Based on the type of unit and the strategy used by the designer, this location may vary. [Section 1106.4](#) addresses the visible alarm requirements specifically and has various issues it addresses, as follows:

1. Complies with [Section 702](#) of [ICC A117.1](#), which focuses on the requirements of NFPA 72, and that such notification devices be hardwired.
2. Addresses the fact that all visible notification devices be activated within the unit, either when the smoke alarms in the unit activate or when that portion of the building fire alarm system in that portion of the building activates.
3. Allows the same visible notification for the smoke alarms in the unit and the building fire alarm system.
4. Prohibits the use of the visible notification for anything other than the operation of the smoke alarms in the unit or the building fire alarm system.

2021 IBC 907.5.2.3.3.1 Wired equipment.

Where wired equipment is used to comply with the future capability required by [Section 907.5.2.3.3](#), the system shall include one of the following capabilities:

1. The replacement of audible appliances with combination audible/visible appliances or additional visible notification appliances.
2. The future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.
3. For wired equipment, the fire alarm power supply and circuits shall have not less than 5-percent excess capacity to accommodate the future addition of visible alarm notification appliances, and a single access point to such circuits shall be available on every story. Such circuits shall not be required to be extended beyond a single access point on a story. The fire alarm system shop drawings required by [Section 907.1.2](#) shall in

clude the power supply and circuit documentation to accommodate the future addition of visible notification appliances.

❖ In terms of the specific capability requirements, this section provides direction as to what may be meant by bringing the wiring to the unit. There has been confusion in the past when it was interpreted that all units are required to be prewired for visible appliances, which was not the intent of [ICC A117.1](#). More specifically, the requirements provide three options for future capability, as follows:

1. Replacement of audible appliances with combination audible/visible appliances or additional visible appliances.
2. Extension of wiring from the unit smoke alarm locations to the required locations of visible appliances.
3. Excess power supply and circuit capacity for potential connection to visible alarm notification appliances. Only a single access point for each circuit is required on each story. As noted with this option, the fire alarm system shop drawings required by [Section 907.1.2](#) shall include the power supply and circuit documentation to accommodate the future addition of visible notification appliances.

2017 ICC/ANSI A117.1 702.1 General. Audible and visible alarms and notification appliances that are part of a building fire alarm system shall be installed in accordance with [NFPA-72](#) listed in [Section 106.2.4](#), be powered by a commercial light and power source, be permanently connected to the wiring of the premises electric system and be permanently installed.

Exception: Audible and visible notification appliances provided within dwelling or sleeping units shall comply with [Sections 1106.2](#) through [1106.4.4](#).

It is important to remember that the location of visible notification devices, if installed, are driven by the requirements of NFPA 72, which may vary the approach taken based on the configuration of the space.