

VISUAL SIGNALS

PURPOSE

This interpretation is to clarify the intended locations for Visual Signal Devices under the Alberta Building Code 2014 (ABC 2014).

DISCUSSION

Safety codes officers and code users have raised issues with the lack of clarity as to the required number and location of visual signal devices. Situations have developed where visual signals are installed in locations that are not necessary for compliance or alternatively, visual signals are omitted from locations that are necessary for compliance and public safety. This interpretation is designed to provide a consistent application of the ABC 2014.

CODE REFERENCES

Article 3.2.4.5. states:

3.2.4.5. Installation and Verification of Fire Alarm Systems

1) Except as permitted by Articles 3.2.4.11. and 3.2.4.20., fire alarm systems, including the voice communication capability where provided, shall be installed in conformance with CAN/ULC-S524, "Installation of Fire Alarm Systems."

Article 3.2.4.20. states:

3.2.4.20. Visual Signals

(See Appendix A.)

- 1) Visual signal devices shall be installed in addition to audible signal devices in *buildings* required to have a fire alarm system and shall conform to CAN/ULC-S526, "Visible Signal Devices for Fire Alarm Systems Including Accessories."
- 2) Visual signal devices required by Sentence (1) shall be installed so that the signal from at least one device is visible within a *suite* in which they are installed.

Article 3.8.3.12. states:

3.8.3.12. Universal Toilet Rooms

- 1) A universal toilet room shall
 - a) be served by a *barrier-free* path of travel,
 - b) have a door capable of being locked from the inside and released from the outside in case of emergency and having
 - i) a latch-operating mechanism that is operable with a closed fist, located not less than 900 mm and not more than 1 000 mm above the floor,
 - ii) if it is an outward swinging door, a door pull not less than 140 mm long located on the inside so that its midpoint is not less than 200 mm and not more than 300 mm from the hinged side of the door and not less than 900 mm and not more than 1 000 mm above the floor (see A-3.8.3.8.(1)(b)(iv) in Appendix A), and

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by
the Building Administrator

[Original Signed]
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- iii) if it is an outward swinging door, a door closer, spring hinges or gravity hinges, so that the door closes automatically,
- c) have one lavatory conforming to Article 3.8.3.11.,
- d) have one water closet conforming to the requirements of Article 3.8.3.9. that has a clearance to the walls of
 - i) not less than 285 mm and not more than 305 mm on one side, and
 - ii) not less than 875 mm on the other side,
- e) have grab bars conforming to Clause 3.8.3.8.(1)(d),
- f) have no internal dimension between the walls that is less than 1 700 mm,
- g) have a coat hook conforming to Clause 3.8.3.8.(1)(e) and a shelf located not more than 1 200 mm above the floor,
- h) be designed to permit a wheelchair to back in alongside the water closet in the space referred to in Subclause (d)(ii), and
- i) be designed to permit a wheelchair to turn in an open space not less than 1 500 mm in diameter.

APPLICATION

Sentence 3.2.4.20.(1) applies to all buildings with a fire alarm system.

Sentence 3.2.4.20.(2) applies to suites and also applies to residential suites.

INTERPRETATION

- 1) Where a fire alarm system is installed, visual signals shall be provided in addition to *alarm signals*
 - a) in *buildings* or portions thereof intended for use primarily by persons with a hearing impairment,
 - b) in *assembly occupancies* in which music and other sounds associated with performances could exceed 100 dBA,
 - c) in any *floor area* in which the ambient noise level is more than 87 dBA, and
 - d) in any *floor area* in which the occupants
 - i) use ear protection devices,
 - ii) are located in an audiometric booth, or
 - iii) are located in sound-insulating enclosures,
 - e) in *public corridors* serving a Group B, C, D or E *major occupancy*,
 - f) in corridors used by the public serving a Group A *major occupancy*,
 - g) in washrooms, except
 - i) those located within *suites of residential occupancy*,
 - ii) those located within *suites of care occupancy*,
 - iii) those located within patients' sleeping rooms, or
 - iv) single toilet rooms,
 - h) in universal toilet rooms (in accordance with Article 3.8.3.12), and
 - i) in a suite of residential occupancy; such that at least one device is located within the principal living area.
- 2) Visual signal devices required by Sentence (1) shall be installed so that the signal from at least one device is visible throughout the *floor area* or portion thereof in which they are installed.
- 3) The visual signal required by (i) shall be visible within the residential suite's principal living area (i.e. living room); which is intended for use by all occupants of the suite.
- 4) Installations shall conform to CAN/ULC-S524-06 "Installation of Fire Alarm Systems" including amendment 1 issued February 2011.

This INTERPRETATION is applicable throughout the province of Alberta.