Correction to Second Revisions

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During preparation of the second revisions to the National Building Code 1990 English, page 92 was inadvertently left almost blank. No change occurred on this page. A replacement page is attached, for those users who discarded their existing page 91-92 before they discovered the error.

The Canadian Codes Centre regrets the error.
(c) fire protection equipment is available to deliver, by means of the fire department connection, the full demand flow rate at a residual water pressure of 450 kPa at the topmost outlet of the standpipe and hose system. (See Appendix A.)

3.2.5.11. Hose Stations and Cabinets

(1) Required hose stations shall be located in or near exits, and where a pressurized vestibule is provided adjacent to exit stairs, the hose station shall be located within the pressurized vestibule.

(2) A hose station located on one side of a horizontal exit shall be considered to serve only the floor area on that side of such exit.

(3) Every hose cabinet shall be located so that its door, when fully opened, will not obstruct the required width of a means of egress.

(4) Hose connections shall be provided with sufficient clearance to permit the use of a standard fire department hose key.

(5) Fire hose stations in a Group B, Division 1 major occupancy are permitted to be located in secure areas, or in lockable cabinets provided that
   (a) identical keys for all cabinets are located at all guard stations, or
   (b) electrical remote release devices are provided and are connected to an emergency power supply.

3.2.5.12. Trouble Signal Annunciation for Valves. In buildings where a fire alarm system is required to have an annunciator by Sentence 3.2.4.8.(1), except for hose valves, all valves controlling water supplies in a standpipe and hose system shall be equipped with an electrically supervised switch for transmitting a trouble signal to the annunciator in the event of movement of the valve handle.

3.2.5.13. Automatic Sprinkler Systems

(1) Except as provided in Sentences (2) and (3), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, “Installation of Sprinkler Systems.” (See Appendix A.)

(2) Where a building contains fewer than 9 sprinklers, the water supply for such sprinklers is permitted to be supplied from the domestic water system for the building provided the required flow for the sprinklers can be met by the domestic system.

(3) Where a water supply serves both a sprinkler system and a system serving other equipment, control valves shall be provided so that either system can be shut off independently.

(4) Open grid and translucent ceilings located below sprinkler systems shall be installed in conformance with NFPA 13, “Installation of Sprinkler Systems,” paragraphs 4-4.14 and 4-4.15.

3.2.5.14. Combustible Sprinkler Piping

(1) Combustible sprinkler piping shall be used only for wet systems in residential occupancies and other light hazard occupancies. (See Appendix A.)

(2) Combustible sprinkler piping shall meet the requirements of ULC C199P-M, “Combustible Piping for Sprinkler Systems.”

(3) Combustible sprinkler piping shall be separated from the area served by the sprinkler system and from any other fire compartment by ceilings, walls, or soffits consisting of, as a minimum, lath and plaster, gypsum board not less than 9.5 mm thick, plywood not less than 13 mm thick, or a suspended membrane ceiling with lay-in panels or tiles and steel suspension grids, with the lay-in panels or tiles having a mass of at least 1.7 kg/m².

(4) Where combustible sprinkler piping is located above a ceiling, an opening through the ceiling that is not protected in conformance with Sentence (3) shall be located so that the distance between the edge of the opening and the nearest sprinkler is not more than 300 mm.

3.2.5.15. Sprinklered Service Space

(1) An automatic sprinkler system shall be installed in a service space referred to in Sentence 3.2.1.1.(7) if flooring for access within the service space is other than catwalks.

(2) The sprinkler system required by Sentence (1) shall be equipped with waterflow detecting devices with each device serving not more than one storey.

(3) The waterflow detecting devices required by Sentence (2) shall be connected to the fire alarm system, if required, to
(a) initiate an alert signal or an alarm signal, and
(b) indicate separately on the fire alarm system annunciator the actuation of each device.

3.2.5.16.  Fire Department Connections
(1) Fire department connections for standpipe and hose systems shall be located so that the distance from a fire department connection to a hydrant is not more than 45 m and is unobstructed.
(2) Fire department connections for sprinkler systems shall be located so that the distance from a fire department connection to a hydrant is not more than 45 m and is unobstructed.

3.2.5.17.  Portable Fire Extinguishers
(1) Portable extinguishers shall be provided and installed in accordance with the appropriate provincial, territorial or municipal regulations or, in the absence of such regulations, the National Fire Code of Canada 1990.
(2) In a Group B, Division 1 major occupancy, portable fire extinguishers are permitted to be located in secure areas, or in lockable cabinets provided that
(a) identical keys for all cabinets are located at all guard stations, or
(b) electrical remote devices are provided and are connected to an emergency power supply.

3.2.5.18.  Protection from Freezing. Equipment forming part of a fire protection system that may be adversely affected by freezing temperatures and that is located in an unheated area shall be adequately protected from freezing.

3.2.6.  Additional Requirements for High Buildings
(See Appendix A.)

3.2.6.1.  Application
(1) This Subsection applies to
(a) every building of Group A, D, E or F major occupancy classification that is more than
(i) 36 m high, measured between grade and the floor level of the top storey, or
(ii) 18 m high, measured between grade and the floor level of the top storey, and in which the cumulative or total occupant load on or above any storey above grade, other than the first storey, divided by 1.8 times the width in metres of all exit stairs at that storey, exceeds 300,
(b) every building containing a Group B major occupancy in which the floor level of the highest storey of that major occupancy is more than 18 m above grade or every building containing a floor area or part of a floor area located above the third storey designed or intended as a Group B, Division 2 occupancy, and
(c) every building containing a Group C major occupancy whose floor level is more than 18 m above grade.

3.2.6.2.  Limits to Smoke Movement
(1) Every building shall be designed to limit the danger to occupants and fire fighters from exposure to smoke in a building fire, as provided in Sentences (2) to (4) and Articles 3.2.6.3. to 3.2.6.7.
(2) Except as provided in Articles 3.2.6.4. to 3.2.6.6., every building shall be designed so that during a period of 2 h after the start of a fire all floor areas that are above the lowest exit storey will not contain more than 1 per cent by volume of contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5 per cent basis determined in conformance with Subsection 2.2.1. (See Appendix A.)
(3) Except as provided in Articles 3.2.6.4. and 3.2.6.6., every building shall be designed so that during a fire the limit described in Sentence (2) on the movement of contaminated air into other floor areas is not exceeded in
(a) each exit stair serving storeys above the lowest exit level, and
(b) each exit stair serving storeys below the lowest exit level.
(See Appendix A.)
(4) Except as provided in Articles 3.2.6.4. and 3.2.6.6., every building shall be designed so that during a fire the limit described in Sentence (2) on the movement of contaminated air into other floor areas is not exceeded in
(a) each exit stair serving storeys above the lowest exit level, and
(b) each exit stair serving storeys below the lowest exit level.
(See Appendix A.)