AMENDMENT PACKAGE NO. 2022 - 1

2015 FIRE CODE COMPENDIUM

July 2022

THIS PACKAGE CONTAINS REVISED PAGES TO THE 2015 FIRE CODE COMPENDIUM FOR THE FOLLOWING:

• Fire Code (O. Reg. 213/07)

- Pages amended by O. Reg 319/22 (Amendments identified by '#' in margin)
- Correction for typographical error on page 106 ("25-2011" to "25-2014")

MINISTRY OF THE SOLICITOR GENERAL OFFICE OF THE FIRE MARSHAL Please replace the existing pages in your copy of the 2015 Fire Code Compendium with the following pages contained in this amendment package.

This document is prepared for convenience only. For accurate reference and current information on amendments to Ontario Regulation 213/07 refer to the Government of Ontario's e-Laws web site at www.e-laws.gov.on.ca

2015 FIRE CODE COMPENDIUM

(Revised to February 1, 2020)

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FIRE CODE

ONTARIO REGULATION 213/07

made under the

FIRE PROTECTION AND PREVENTION ACT, 1997

Filed: May 25, 2007 In Force: November 21, 2007

Including amendments current to July 1, 2022

O. REG. 319/22 (IDENTIFIED BY '#' IN MARGIN)

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Guide to the Fire Code

The Fire Code is divided into three Divisions (A, B and C), each of which utilizes a decimal numbering system to identify particular requirements as illustrated below:

Division B	
2	Part
2.7	Section
2.7.1.	Subsection
2.7.1.4.	Article
2.7.1.4.(3)	Sentence
2.7.1.4.(3)(b)	Clause
2.7.1.4.(3)(b)(ii)	Subclause

CHRONOLOGICAL HISTORY OF THE FIRE CODE

The first edition of the Ontario Fire Code was enacted in November 1981. The following table lists the various editions of the Fire Code (Establishing Regulations column) as well as interim amending regulations with relevant dates and brief descriptions.

Establishing Regulation	Amending Regulations	Date Filed	Effective Date	Nature of Regulation or Amendment
O. Reg. 730/81		November 2, 1981	November 21, 1981	First Edition of Fire Code
	O. Reg. 251/83	April 29, 1983	May 14, 1983	Introduce Retrofit Sections 9.1, 9.2, 9.3
	O. Reg. 425/84	June 29, 1984	July 14, 1984	Change in compliance date for Section 9.2
O. Reg. 67/87		February 11, 1987	February 28, 1987	New Fire Code including new Retrofit Section 9.4
	O. Reg. 281/90	June 4, 1990	June 23, 1990	New Subsection 3.5.3. Outdoor Tire Storage Yards
Regulation 454, R.R.O. 1990			November 16, 1992	New Fire Code with no significant changes (legislative consolidation)
	O. Reg. 627/92	October 9, 1992 November 16, 1992 (amended date)	October 24, 1992	New Retrofit Sections 9.5, 9.6
	O. Reg. 385/94	June 23, 1994	July 14, 1994; August 13, 1994 for Articles 9.8.4.2., 9.8.4.3.	New Retrofit Section 9.8
	O. Reg. 389/97	October 30, 1997	November 21, 1997	Revoking Regulation 454 and O. Reg. 627/92 and 385/94
O. Reg. 388/97		October 30, 1997	November 21, 1997	New Fire Code and introduction of Part 4, Flammable and Combustible Liquids
	O. Reg. 398/98	July 6, 1998	July 25, 1998	Section 2.13 and Subsection 6.3.3. (Smoke Alarms) come into effect
	O. Reg. 428/98	July 28, 1998	July 31, 1998	Hotels (Article 1.1.6.2.) added to Fire Code

Establishing Regulation	Amending Regulations	Date Filed	Effective Date	Nature of Regulation or Amendment
O. Reg. 388/97	O. Reg. 302/99	May 4, 1999	May 4, 1999	Change references to Electricity Act, 1998
	O. Reg. 475/00	August 21, 2000	September 9, 2000	Part 4 amendments
	O. Reg. 315/01	August 10, 2001	September 4, 2001	Provide discretion in Section 5.6 – Compressed Gas Cylinders
	O. Reg. 451/05	July 29, 2005	July 29, 2005	Amendments for developmental services facilities
	O. Reg. 650/05	December 12, 2005	March 1, 2006	Smoke alarm on every storey of home
	O. Reg. 144/06	May 3, 2006	January 1, 2007	Amendments for hotels including new Retrofit Section 9.9
O. Reg. 213/07		May 25, 2007	November 21, 2007	New Fire Code in objective-based format and including technical changes
	O. Reg. 150/13	May 9, 2013	January 1, 2014	Amendments for vulnerable occupancies including new Retrofit Section 9.7
	O. Reg. 194/14	October 14, 2014	October 15, 2014	New requirements for carbon monoxide alarms and testing of smoke alarms
	O. Reg. 256/14	December 10, 2014	January 1, 2015	Technical and editorial amendments
	O. Reg. 275/14	December 16, 2014	January 1, 2015	Amendments for school day care facilities
	O. Reg. 108/18	March 19, 2018	July 1, 2018	New requirements for testing of standpipe fire department connections
	O.Reg 33/19	March 14, 2019	July 1, 2019	New requirements for cannabis and other hazardous extraction operations
	O. REG. 319/22	April 6, 2022	April 11, 2022	Administrative amendment for name change of "Long-Term Care Homes Act, 2007" to "Fixing Long-Term Care Act, 2021"

(continued from previous page)

TABLE 1.2.1.A.

(continued)

Issuing Agency	Document Number	Title of Document	Code Reference
ASTM	E1515-07	Standard Test Method for Minimum Explosible Concentration of Combustible Dusts	1.4.1.2. of Division A (Minimum explosible concentration)
CGA	P-1-2008	Safe Handling of Compressed Gases in Containers	5.6.1.1.(3)
CGSB	CAN2-4.2-M77	Textile Test Methods, Test Method 27.1	2.3.2.1.(2)
CGSB	CAN/CGSB-24.3- M92	Identification of Piping Systems	4.3.1.7. 4.4.4.1.(3) 4.4.8.6.(1)
CPPI		Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification (1990)	4.3.1.7. 4.4.4.1.(3) 4.4.8.6.(1)
CSA	6.19-01	Residential Carbon Monoxide Alarming Devices	2.16.2.1.(5) 6.3.4.7.(4)
CSA	B51-09	Boiler, Pressure Vessel and Pressure Piping Code	4.3.1.3.(2)
CSA	B306-M1977	Portable Fuel Tanks for Marine Use	4.2.3.1.(1)
CSA	B365-10	Installation Code for Solid-Fuel-Burning Appliances and Equipment	2.6.2.1. 2.6.2.2.
CSA	B376-M1980	Portable Containers for Gasoline and Other Petroleum Fuels	4.2.3.1.(1)
CSA	B620-2009	Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods	4.2.3.1.(1)
CSA	C22.2 No. 141-10	Emergency Lighting Equipment	9.9.5.5.(2)
CSA	C22.2 No.152- M1984 (R2011)	Combustible Gas Detection Instruments	5.17.3.3.(1)
CSA	C282-09	Emergency Electrical Power Supply for Buildings	6.7.1.1.(1) 6.7.1.3. 9.9.5.5.(1) and (2)
CSA	CAN/CSA-W117.2- 09	Safety in Welding, Cutting and Allied Processes	5.17.1.2.
CSA	Z32-09	Electrical Safety and Essential Electrical Systems in Health Care Facilities	6.7.1.1.(2)
CSA	Z245.1-07	Steel Pipe	4.4.2.1.(4)
CSA	Z305.12-06	Safe Storage, Handling, and Use of Portable Oxygen Systems in Residential Buildings and Health Care Facilities	2.15.1.2.
МАН	Supplementary Standard SB-4, September 14, 2012	Measures for Fire Safety in High Buildings	7.3.1.3.(2)
NACE	RP0285-2011	Corrosion Control of Underground Storage Tank Systems by Cathodic Protection	4.3.9.1.(1)
NACE	SP0169-2007	Control of External Corrosion on Underground or Submerged Metallic Piping Systems	4.4.3.1.(2)
NFPA	10-2010	Portable Fire Extinguishers	6.2.7.1.
NFPA	11-2010	Standard for Low-, Medium-, and High- Expansion Foam	4.3.2.5.(2) 6.8.1.1.(3)
NFPA	12-2011	Standard on Carbon Dioxide Extinguishing Systems	6.8.1.1.(3)

Issuing Agency	Document Number	Title of Document	Code Reference
NFPA	12A-2009	Standard on Halon 1301 Fire Extinguishing Systems	6.8.1.1.(3)
NFPA	12B-1990	Standard on Halon 1211 Fire Extinguishing Systems	6.8.1.1.(3)
NFPA	13-2013	Standard for the Installation of Sprinkler Systems	3.3.1.8.(1) 3.3.1.9. 3.3.2.2.(5) 3.3.2.10.(3) 3.3.3.6.(1) 3.3.4.3.(4) 4.8.4.3.(4) 4.9.4.1.(2) 5.4.2.3. 5.4.5.1. 5.12.8.2.(1) 5.13.6.1. 6.5.1.1.(1) 9.2.5.2.(4) Table 9.2.5.A. 9.4.5.5.(2) 9.5.5.3.(2) 9.6.5.5.(2) 9.7.5.1.(1) and (4)
NFPA	13D-2010	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	6.5.1.1.(1) 9.7.5.1.(2) 9.8.5.1.
NFPA	13R-2010	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	6.5.1.1.(1) 9.4.5.5.(3) 9.5.5.3.(2) 9.7.5.1.(3)
NFPA	15-2012	Standard for Water Spray Fixed Systems for Fire Protection	4.3.2.5.(2) 6.8.1.1.(4)
NFPA	16-2011	Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems	6.8.1.1.(4)
NFPA	17-2009	Standard for Dry Chemical Extinguishing Systems	6.8.1.1.(3)
NFPA	17A-2009	Standard for Wet Chemical Extinguishing Systems	6.8.1.1.(3)
NFPA	18-2011	Standard on Wetting Agents	6.8.1.1.(5)
NFPA	20-2010	Installation of Stationary Pumps for Fire Protection	9.4.5.5.(5) 9.7.5.1.(6)
NFPA	24-2013	Standard for the Installation of Private Fire Service Mains and their Appurtenances	4.8.4.3.(4)
NFPA	25-2014	Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems	6.4.1.6. 6.5.1.1.(2) 6.6.1.5.(1) to (3)
NFPA	30-2012	Flammable and Combustible Liquids Code	4.2.7.7.(1) 4.2.10.5.(1)
NFPA	32-2011	Standard for Drycleaning Plants	5.14.10.1.(1)

(5) Despite Sentences (1) and (2), fire dampers or fire-stop flaps are not required in ducts at penetrations of a fire separation.

9.3.3.9. Existing wired glass **closures** set in fixed steel frames in a **fire separation** are deemed to be in compliance with Article 9.3.3.8.

Exit signs

9.3.3.10. (1) Exit signs shall be located along a means of egress so that directions of exit travel are apparent to the occupants.

- (2) Exit signs required by Sentence (1) shall have the word "EXIT" in block letters and such letters shall be
 - (a) internally or externally illuminated,
 - (b) coloured red on an opaque or contrasting field, and
 - (c) at least 115 mm high with a 19 mm stroke.

Interior finishes

9.3.3.11. The **flame-spread rating** of interior finishes on walls and ceilings within a **means of egress** shall not exceed 200.

Illumination of egress

9.3.3.12. Corridors and stairways shall be lighted to the intensity of 50 lx measured at the floor level, or 5 watts/m² of **floor area**.

Emergency lighting

9.3.3.13. Where sleeping accommodation is provided for more than 10 persons, emergency lighting shall be provided to corridors and stairways in accordance with Articles 9.9.11.4. and 9.9.11.5. of the **1986 Building Code**.

Subsection 9.3.4. Fire Alarm and Detection

Fire alarm requirements

9.3.4.1. (1) A **building** to which this Section applies that does not have floor assemblies having a minimum 45 min **fire-resistance rating** and **public corridors** or corridors serving sleeping rooms not within a **dwelling unit** that are not fire-separated from the remainder of the **building** by a minimum 30 min **fire-resistance rating** shall have a fire alarm system that complies with Articles 9.10.17.5. and 9.10.17.11. of the **1986 Building Code**, and shall have

- (a) **smoke alarms** that comply with Sentence (2) and that are installed and interconnected so that the activation of any **smoke alarm** will sound a similar signal in each of the interconnected devices, or
- (b) fire alarm system **smoke detectors** installed on the ceiling of each floor adjacent to each stairway, and on the ceiling in the **basement** adjacent to each stairway.
- (2) Smoke alarms referred to in Clause (1)(a) shall
 - (a) be installed on the ceiling in the corridor of each floor adjacent to each stairway and on the ceiling in the **basement** adjacent to each stairway,
 - (b) be on a separate circuit with no disconnect switch between the overcurrent device and the **smoke** alarms, and
 - (c) employ devices and an interconnected installation that are listed.

9.3.4.2. (1) A fire alarm system complying with Articles 9.10.17.4., 9.10.17.5., 9.10.17.11. and Subsection 9.10.18. of the **1986 Building Code** shall be installed where

- (a) sleeping accommodation is provided for more than 10 persons, and
- (b) the floor assemblies have a fire-resistance rating not less than 45 min and public corridors or corridors serving sleeping rooms not within a dwelling unit are separated from the remainder of the building by fire separations having a fire-resistance rating not less than 30 min.

9.3.4.3. Where a fire alarm system is required and sleeping accommodation is not provided for more than 14 persons, an interconnected **smoke alarm** system in accordance with Clause 9.3.4.1.(1)(a) is deemed to be in compliance with Article 9.3.4.2.

9.3.4.4. Despite Articles 9.3.4.1. and 9.3.4.2., existing fire alarm systems may be **approved** where the system reliability and performance will not increase the risk of life safety.

Subsection 9.3.5. Suppression

Portable extinguishers

9.3.5.1. (1) Despite the provisions of Subsection 6.2.6., at least one 2A rated portable extinguisher shall be provided on each floor.

(2) At least one 5B:C rated portable extinguisher shall be installed in each kitchen where shared cooking facilities exist.

SECTION 9.4 HEALTH CARE FACILITIES

Subsection 9.4.1. Application and General

Application

- 9.4.1.1. (1) This Section applies to
 - (a) homes for special care regulated under the **Homes for Special Care Act** in which sleeping accommodation is provided for more than 10 residents,
 - (b) long-term care homes regulated under the Fixing Long-Term Care Act, 2021,
 - (c) private hospitals regulated under the Private Hospitals Act, or
 - (d) public hospitals regulated under the **Public Hospitals Act**.

Definitions

9.4.1.2. For the purposes of this Section,

"1986 Building Code" means Ontario Regulation 419/86, as it read on February 11, 1987;

"existing" means in existence on February 11, 1987.

Subsection 9.4.2. Containment

Construction

9.4.2.1. (1) Fire separations required under this Section to have a fire-resistance rating shall comply with Subsection 3.1.5. and Articles 3.1.6.1., 3.1.6.2. and 3.1.6.3. of the **1986 Building Code**.

(2) If a **fire-resistance rating** of 1 h or less is required, existing wall assemblies, floor assemblies and ceilings and their supporting assemblies are deemed to comply with Sentence (1) if they consist of lath and plaster or gypsum board.

(3) Heavy timber construction that complies with Article 3.1.4.4. of the **1986 Building Code** is deemed to have a 45 min fire-resistance rating.

(4) Buildings with limited combustible components may be approved as noncombustible construction.

(5) Floor assemblies shall be constructed as **fire separations** with **fire-resistance ratings** in accordance with this Subsection.

Combustible construction up to 2 storeys

9.4.2.2. (1) **Buildings** of **combustible construction** shall comply with the provisions of Sentence (2) where the **building** is

- (a) 1 storey in building height and not greater than 1000 m^2 in building area, or
- (b) 2 storeys in building height and not greater than 500 m^2 in building area.

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance** rating not less than 45 min.

(3) Despite Sentence (2), where the **building** is **sprinklered**, a **fire-resistance rating** is not required for floor assemblies or for walls, columns and arches supporting floor assemblies.

Combustible construction up to 4 storeys

9.4.2.3. (1) **Buildings** of **combustible construction** shall comply with the provisions of Sentences (2) and (3) where the **building** is