

National Fire Code of Canada 2005

Revisions and Errata

Issued by the Canadian Commission on Building and Fire Codes

The tables that follow list revisions and errata that apply to the National Fire Code of Canada 2005. Code pages containing revisions issued on 08-06-20 have been updated for your convenience; they are provided following the tables.

The revisions have been approved by the Canadian Commission on Building and Fire Codes. The following symbol appears following the title of an Article, Appendix Note, Table or Figure containing text that is affected by the revisions: ★

The errata are corrections that have been identified; they are provided to facilitate the use of the Code. The following symbol appears following the title of an Article, Appendix Note, Table or Figure containing text that is affected by the errata: ◇

Contact your local authority having jurisdiction to find out if these revisions and errata apply in your province or territory.

The intent and application statements affected by these revisions and errata have been updated, as applicable, on the CD-ROM version of the Code.

Revisions

Table of Revisions — National Fire Code 2005

Provision	Revision	Date of Issue
2 0 0 8		
Division B		
Table 1.3.1.2.	For revisions made to this Table, see the updated Code pages provided.	08-06-20
Table A-1.3.1.2.(1)	For revisions made to this Table, see the updated Code pages provided.	08-06-20

Errata

Table of Errata — National Fire Code 2005

Provision	Erratum	Date of Issue
2 0 0 7		
Division A		
1.4.1.2.(1)	“(See Appendix A.)” was added to the end of the definition for fire-resistance rating	07-12-01
3.2.1.1.(1)	The following functional statement was added after F34: F36 To minimize the risk that persons will be trapped in confined spaces.	07-12-01

Table of Errata — National Fire Code 2005 (Continued)

Provision	Erratum	Date of Issue
A-1.4.1.2.(1)	The following entry was added after the entry for "Exit:" Fire-resistance rating Since it is not practicable to measure the fire resistance of constructions in situ, they must be evaluated under some agreed test conditions. A specified fire-resistance rating is not necessarily the actual time that the assembly would endure in situ in a building fire, but is that which the particular construction must meet under the specified methods of test.	07-12-01
Division B		
Table 1.3.1.2.	Entry for NFPA 32 was corrected to read "32-2000"	07-12-01
Sections 2.14., 3.4., 4.12., 5.7., 6.8. and 7.4.	A change bar was added to each of these Sections	07-12-01
4.3.7.4.(2)(a)(i)	Subclause was corrected to read "Clauses 4.3.1.2.(1)(l), (m), (n) or (o)..."	07-12-01
Table 4.12.1.1.	Entry for 4.2.10.1.(1): "OS.1" was changed to "OS1.1" Entries for 4.3.2.4.(2): Both entries were replaced with the following single attribution: "[F12-OP1.2]" Entry for 4.5.7.1.(3): 2nd attribution: "OP1" was changed to "OP1.3"	07-12-01
Table 5.7.1.1.	Entry for 5.1.1.3.(1): "OS1.12" was changed to "OS1.1" Entry for 5.3.2.3.(1): The text was deleted from the attribution [F12-OS1.2]: " Applies to portion of Code text: 'A portable extinguisher ... shall be provided within 7.5 m of any machine producing wood dust, particles or shavings.' " Entry for 5.6.1.10.(2): 2nd attribution: "OS5.6" was replaced with "OS3.4"	07-12-01
Table 7.4.1.1.	Entry for 7.3.11.1.(1): 1st attribution: "OP1.5" was deleted	07-12-01
Table A-1.3.1.2.(1)	Title of API RP 1604-1996 was corrected to read "Closure of Underground Petroleum Storage Tanks"	07-12-01
Division C		
2.3.1.2.(1)(b)	The following deletions were implemented: "in the NBC that are attributed to the objectives Fire Safety (OS1), Safety in Use (OS3), Fire Protection of the Building or Facility (OP1), or Protection of Adjacent Buildings or Facilities from Fire (OP3)"	07-12-01
2 0 0 8		
Division B		
4.2.7.5.(1)	Reference to Clause 4.2.7.2.(1)(a) in the first part of Sentence was corrected to read "Clause 4.2.7.2.(1)(d)"	08-06-20

Part 1 General

Section 1.1. General

1.1.1. Application

1.1.1.1. Application

1) This Part applies to all *buildings* and facilities covered in this Code. (See Article 1.1.1.1. of Division A.)

1.1.2. Objectives and Functional Statements

1.1.2.1. Attribution to Acceptable Solutions

1) For the purposes of compliance with this Code as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in Division B shall be the objectives and functional statements identified in Sections 2.14., 3.4., 4.12., 5.7., 6.8. and 7.4. (See Appendix A.)

Section 1.2. Terms and Abbreviations

1.2.1. Definitions of Words and Phrases

1.2.1.1. Non-defined Terms

1) Words and phrases used in Division B that are not included in the list of definitions in Article 1.4.1.2. of Division A shall have the meanings that are commonly assigned to them in the context in which they are used, taking into account the specialized use of terms by the various trades and professions to which the terminology applies.

2) Where objectives and functional statements are referred to in Division B, they shall be the objectives and functional statements described in Parts 2 and 3 of Division A.

3) Where acceptable solutions are referred to in Division B, they shall be the provisions stated in Parts 2 to 7.

1.2.1.2. Defined Terms

1) The words and terms in italics in Division B shall have the meanings assigned to them in Article 1.4.1.2. of Division A.

1.2.2. Symbols and Other Abbreviations

1.2.2.1. Symbols and Other Abbreviations

1) The symbols and other abbreviations in Division B shall have the meanings assigned to them in Article 1.4.2.1. of Division A and Article 1.3.2.1.

Section 1.3. Referenced Documents and Organizations

1.3.1. Referenced Documents

1.3.1.1. Effective Date

1) Unless otherwise specified herein, the documents referenced in this Code shall include all amendments, revisions and supplements effective to 30 June 2004.

1.3.1.2. Applicable Editions

1) Where documents are referenced in this Code, they shall be the editions designated in Table 1.3.1.2. (See Appendix A.)

Table 1.3.1.2.
Documents Referenced in the National Fire Code of Canada 2005 ◇ ★
 Forming Part of Sentence 1.3.1.2.(1)

Issuing Agency	Document Number	Title of Document	Code Reference
API	5L-2004	Line Pipe	4.5.2.1.(4)
API	12B-1995	Bolted Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	12D-1994	Field Welded Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	12F-1994	Shop Welded Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	620-2002	Design and Construction of Large, Welded, Low-Pressure Storage Tanks	4.3.1.3.(1) 4.3.3.1.(1)
API	650-2007	Welded Steel Tanks for Oil Storage	4.3.1.2.(1) 4.3.3.1.(1)
API	653-2001	Tank Inspection, Repair, Alteration, and Reconstruction	Table 4.4.1.2.B.
API	1104-2005	Welding of Pipelines and Related Facilities	4.5.5.2.(1) 4.5.10.7.(6)
API	2000-1998	Venting Atmospheric and Low-Pressure Storage Tanks: Nonrefrigerated and Refrigerated	4.3.4.1.(1)
API	2200-1994	Repairs to Crude Oil, Liquefied Petroleum Gas and Products Pipelines	4.5.10.7.(6)
API	2201-2003	Safe Hot Tapping Practices in the Petroleum and Petrochemical Industries	4.5.10.7.(6)
ASME	ANSI/ASME B16.5-2003	Pipe Flanges and Flanged Fittings NPS ½ Through NPS 24 Metric/Inch Standard	4.5.5.3.(1)
ASME	ANSI/ASME B31.3-2006	Process Piping	4.5.2.1.(5)
ASME	BPVC-2004	Boiler and Pressure Vessel Code	4.3.1.3.(1) 4.5.9.5.(2) 4.5.9.6.(1)
ASME/CSA	ASME A17.1-2007/CSA B44-07 ⁽³⁾	Safety Code for Elevators and Escalators	7.2.2.1.(2)
ASTM	A 53/A 53M-06a	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless	4.5.2.1.(4)
ASTM	A 193/A 193M-07	Alloy-Steel and Stainless Steel Bolting Materials for High Temperature or High Pressure Service and Other Special Purpose Applications	4.5.5.4.(1)
ASTM	D 56-05	Flash Point by Tag Closed Cup Tester	4.1.3.1.(1)
ASTM	D 93-07	Flash Point by Pensky-Martens Closed Cup Tester	4.1.3.1.(2)
ASTM	D 323-06	Vapor Pressure of Petroleum Products (Reid Method)	1.4.1.2.(1) ⁽¹⁾
ASTM	D 3278-96e1	Flash Point of Liquids by Small Scale Closed-Cup Apparatus	4.1.3.1.(4)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
ASTM	D 3828-05	Flash Point by Small Scale Closed Cup Tester	4.1.3.1.(3)
CCBFC	NRCC 47666	National Building Code of Canada 2005	1.3.3.2.(1) ⁽¹⁾ 1.4.1.2.(1) ⁽¹⁾ 2.1.2.1.(1) 2.1.3.1.(1) 2.1.3.2.(1) 2.1.3.4.(1) 2.1.3.6.(1) 2.2.1.1.(1) 2.2.1.1.(2) 2.2.1.1.(3) 2.2.2.1.(1) 2.2.2.1.(2) 2.2.2.4.(2) 2.3.1.1.(1) 2.3.1.2.(1) ⁽²⁾ 2.3.1.4.(1) 2.4.1.2.(1) 2.5.1.1.(1) 2.6.1.1.(1) 2.6.1.5.(1) 2.6.1.9.(1) 2.6.2.1.(1) 2.7.1.1.(1) 2.7.1.2.(1) 2.7.1.4.(2) 2.7.3.1.(1) 2.8.1.1.(1) 2.8.2.4.(1) 2.8.2.5.(2) 2.8.3.1.(1) 2.8.3.2.(1) 2.9.1.1.(1) 2.9.3.6.(1) 2.10.1.1.(1) 2.11.1.1.(1) 2.13.2.1.(1) 2.13.2.2.(2) 3.2.6.2.(1) 3.2.7.12.(3) 3.2.9.2.(7) 3.3.2.5.(1) 4.1.7.1.(1) 4.2.7.5.(2) 4.2.11.3.(1) 4.3.2.4.(2) 4.3.3.2.(1) 4.3.13.4.(1) 4.5.8.2.(3) 4.6.3.3.(2) 4.6.3.3.(3) 5.1.3.1.(1) 5.5.2.2.(1) 5.6.1.6.(1) 5.6.1.11.(3) 5.6.1.19.(1) 7.1.1.1.(1) 7.1.1.2.(1) 7.1.1.2.(2) 7.1.1.4.(2)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
CCBFC	NRCC 40383	User's Guide – NBC 1995 Fire Protection, Occupant Safety and Accessibility (Part 3)	7.1.1.2.(2) 7.2.3.1.(1) 7.2.3.3.(1) 7.3.2.1.(1) 7.3.3.1.(1) 7.3.4.1.(1) 7.3.5.1.(1) 7.3.6.1.(1) 7.3.7.1.(1) 7.3.8.1.(1) 7.3.9.1.(1) 7.3.10.1.(1) 7.3.11.1.(1) 7.3.12.1.(1) 7.3.13.1.(1) 7.3.14.1.(1) 7.3.15.1.(1)
CCME	PN 1326	Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum Products and Allied Petroleum Products	4.4.2.1.(3)
CGSB	CAN/CGSB-4.162-M80	Hospital Textiles — Flammability Performance Requirements	2.3.2.3.(1)
CNSC	2000	Nuclear Safety and Control Act and its Regulations	3.1.1.2.(1)
CPPI	1990	Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification	4.3.1.7.(1) 4.5.4.1.(3) 4.5.7.6.(1)
CPPI	PACE Report No. 87-1	Impressed Current Method of Cathodic Protection of Underground Petroleum Storage Tanks	4.3.9.1.(2) 4.5.3.1.(2)
CSA	B51-03	Boiler, Pressure Vessel, and Pressure Piping Code	4.3.1.3.(2)
CSA	B108-99	Natural Gas Fuelling Stations Installation Code	4.6.1.1.(2)
CSA	B139-04	Installation Code for Oil-Burning Equipment	4.1.1.1.(3) 5.6.1.12.(1)
CSA	CAN/CSA-B149.1-05	Natural Gas and Propane Installation Code	3.1.1.4.(2) 3.1.1.4.(3) 4.6.1.1.(2) 5.6.1.12.(1)
CSA	CAN/CSA-B149.2-05	Propane Storage and Handling Code	3.1.1.4.(2) 3.2.8.2.(3) 4.6.1.1.(2)
CSA	B306-M1977	Portable Fuel Tanks for Marine Use	4.2.3.1.(1)
CSA	B346-M1980	Power-Operated Dispensing Devices for Flammable Liquids	4.6.3.1.(1)
CSA	B376-M1980	Portable Containers for Gasoline and Other Petroleum Fuels	4.2.3.1.(1)
CSA	B620-03	Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods	4.2.3.1.(1)
CSA	C22.1-06	Canadian Electrical Code, Part 1	3.1.4.1.(1) 4.1.4.1.(1) 4.1.4.1.(2) 5.1.2.1.(1) 5.1.2.2.(1) 5.3.1.2.(2) 5.3.1.2.(3) 5.3.1.10.(2) 5.5.3.4.(1) 5.6.1.10.(2)
CSA	CAN/CSA-C282-05	Emergency Electrical Power Supply for Buildings	6.5.1.1.(1) 6.5.1.4.(1)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
CSA	S350-M1980	Code of Practice for Safety in Demolition of Structures	5.6.1.20.(1)
CSA	CAN/CSA-W117.2-06	Safety in Welding, Cutting and Allied Processes	5.2.1.1.(2)
CSA	Z32-04	Electrical Safety and Essential Electrical Systems in Health Care Facilities	6.5.1.1.(2)
CSA	Z245.1-07	Steel Pipe	4.5.2.1.(4)
EPA	EPA 510-B-93-004	Doing Inventory Control Right for Underground Storage Tanks	4.4.2.1.(2)
EPA	EPA 510-B-95-009	Introduction to Statistical Inventory Reconciliation: For Underground Storage Tanks	4.4.2.1.(4)
EPA	EPA 530/UST-90/007	Evaluating Leak Detection Methods: Statistical Inventory Reconciliation Methods (SIR)	4.4.2.1.(4)
HC	R.S., 1985, c. H-3	Hazardous Products Act	4.2.3.2.(2)
HC	2002, c. 28	Pest Control Products Act	4.2.3.2.(2)
HC	Hazardous Products Act, Part II	Workplace Hazardous Materials Information System (WHMIS) of the Hazardous Products Act	Table 3.2.7.1. 3.2.7.15.(2)
IMO	2006	International Maritime Dangerous Goods Code	3.3.4.8.(1)
NFPA	10-2002	Portable Fire Extinguishers	2.1.5.1.(2) 6.2.1.1.(1)
NFPA	11-2005	Low-, Medium-, and High-Expansion Foam	2.1.3.5.(3) 4.3.2.5.(2)
NFPA	12-2005	Carbon Dioxide Extinguishing Systems	2.1.3.5.(3)
NFPA	12A-2004	Halon 1301 Fire Extinguishing Systems	2.1.3.5.(3)
NFPA	12B-1990	Halon 1211 Fire Extinguishing Systems	2.1.3.5.(3)
NFPA	13-2007	Installation of Sprinkler Systems	3.2.1.1.(1) 3.2.2.4.(3) 3.2.3.3.(1) 3.2.4.3.(1)
NFPA	15-2007	Water Spray Fixed Systems for Fire Protection	2.1.3.5.(4) 4.3.2.5.(2)
NFPA	16-2007	Installation of Foam-Water Sprinkler and Foam-Water Spray Systems	2.1.3.5.(4)
NFPA	17-2002	Dry Chemical Extinguishing Systems	2.1.3.5.(3)
NFPA	17A-2002	Wet Chemical Extinguishing Systems	2.1.3.5.(3)
NFPA	18-2006	Wetting Agents	2.1.3.5.(5)
NFPA	25-2002	Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems	6.4.1.1.(1)
NFPA	30-2003	Flammable and Combustible Liquids Code	4.2.7.6.(1)
NFPA	30B-2007	Manufacture and Storage of Aerosol Products	3.2.5.2.(1) 3.2.5.5.(1)
NFPA	32-2007	Drycleaning Plants	5.4.2.1.(1)
NFPA	33-2007	Spray Application Using Flammable or Combustible Materials	5.4.5.2.(1)
NFPA	34-2007	Dipping and Coating Processes Using Flammable or Combustible Liquids	5.4.6.2.(1)
NFPA	37-2006	Installation and Use of Stationary Combustion Engines and Gas Turbines	4.3.12.2.(1)
NFPA	51-2007	Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting and Allied Processes	5.2.2.4.(1)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
NFPA	68-2007	Explosion Protection by Deflagration Venting	3.2.8.2.(1) 4.2.9.5.(1) 4.3.13.3.(1) 4.9.3.1.(1) 4.9.4.2.(1) 5.3.1.6.(2)
NFPA	69-2002	Explosion Prevention Systems	4.3.2.5.(2) 4.9.4.2.(1) 5.3.1.7.(2)
NFPA	82-2004	Incinerators and Waste and Linen Handling Systems and Equipment	2.6.2.2.(1)
NFPA	86-2007	Ovens and Furnaces	5.4.1.2.(1)
NFPA	91-2004	Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	3.2.2.3.(5) 4.1.7.2.(5) 5.5.4.3.(1)
NFPA	96-2004	Ventilation Control and Fire Protection of Commercial Cooking Operations	2.6.1.9.(2)
NFPA	505-2006	Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operation	3.1.3.1.(1)
NFPA	664-2007	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	5.3.1.3.(2) 5.3.2.1.(1)
NFPA	705-2003	Field Flame Test for Textiles and Films	2.3.2.2.(1) 2.9.2.1.(1)
NRCan		Explosives Act and its Regulations	3.1.1.3.(1) 5.1.1.2.(1)
NRCan	2002	Display Fireworks Manual	5.1.1.3.(1)
TC		Canadian Aviation Regulations - Part III	2.13.1.1.(1)
TC	SOR/2001-286	Transportation of Dangerous Goods Regulations (TDGR)	1.4.1.2.(1) ⁽¹⁾ 3.1.2.1.(1) 3.1.2.5.(1) Table 3.2.7.1. 3.2.7.1.(2) 3.2.7.14.(1) 3.2.7.14.(4) 3.2.7.15.(2) 3.3.4.1.(3) 4.1.1.1.(3) 4.2.3.1.(1) 4.2.3.2.(2)
TC	2001	Standards Respecting Pipeline Crossings Under Railways	4.5.6.4.(3)
TC	CTC 1982-8 RAIL	Railway Prevention of Electric Sparks Regulations	4.7.4.5.(2) 4.8.5.1.(1)
TC	General Order No. O-32, C.R.C., c1148	Flammable Liquids Bulk Storage Regulations	4.5.6.4.(4) 4.7.2.2.(1) 4.7.4.1.(2)
ULC	CAN/ULC-S109-03	Flame Tests of Flame-Resistant Fabrics and Films	2.3.2.1.(1)
ULC	CAN/ULC-S531-02	Smoke Alarms	2.1.3.3.(1)
ULC	CAN/ULC-S536-04	Inspection and Testing of Fire Alarm Systems	6.3.1.2.(1)
ULC	CAN/ULC-S552-02	Maintenance and Testing of Smoke Alarms	6.7.1.1.(1)
ULC	CAN/ULC-S553-02	Installation of Smoke Alarms	2.1.3.3.(3)
ULC	CAN/ULC-S561-03	Installation and Services for Fire Signal Receiving Centres and Systems	6.3.1.3.(1)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
ULC	ULC-S601-00	Shop Fabricated Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC-S601(A)-2001	Refurbishing of Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids	4.3.1.10.(2)
ULC	CAN/ULC-S602-03	Aboveground Steel Tanks for the Storage of Combustible Liquids Intended to be Used as Heating and/or Generator Fuels	4.3.1.2.(1)
ULC	ULC-S603-00	Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.4.3.3.(3)
ULC	ULC-S603(A)-2001	Refurbishing of Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.10.(3)
ULC	CAN/ULC-S603.1-03	External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.8.5.(1) 4.3.9.1.(1) 4.5.3.1.(2)
ULC	CAN/ULC-S612-99	Hose for Flammable and Combustible Liquids	4.6.5.1.(1)
ULC	ULC-S615-98	Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.8.5.(2) 4.4.3.3.(3)
ULC	ULC-S615(A)-2002	Refurbishing of Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids	4.3.1.10.(3)
ULC	CAN/ULC-S620-07	Hose Nozzle Valves for Flammable and Combustible Liquids	4.5.7.1.(2) 4.6.5.2.(1)
ULC	ULC-S630-00	Shop Fabricated Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.3.2.(1)
ULC	ULC-S630(A)-2001	Refurbishing of Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids	4.3.1.10.(2)
ULC	CAN/ULC-S633-99	Flexible Underground Hose Connectors for Flammable and Combustible Liquids	4.5.6.13.(2)
ULC	CAN/ULC-S642-M87	Compounds and Tapes for Threaded Pipe Joints	4.5.5.1.(1)
ULC	ULC-S643-00	Shop Fabricated Steel Aboveground Utility Tanks for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC-S644-00	Emergency Breakaway Fittings for Flammable and Combustible Liquids	4.6.5.2.(4)
ULC	ULC-S651-00	Emergency Valves for Flammable and Combustible Liquids	4.5.7.1.(3) 4.6.6.3.(1)
ULC	ULC-S652-93	Tank Assemblies for Collection of Used Oil	4.3.1.2.(1)
ULC	ULC-S653-94	Aboveground Steel Contained Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC-S655-98	Aboveground Protected Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.2.1.(7)
ULC	ULC/ORD-C30-1995	Safety Containers	4.1.5.8.(2) 4.2.3.1.(1) 4.2.6.4.(1) 5.5.5.2.(2)
ULC	ULC/ORD-C58.9-1997	Secondary Containment Liners for Underground and Aboveground Flammable and Combustible Liquid Tanks	4.3.7.2.(2)
ULC	ULC/ORD-C58.12-1992	Leak Detection Devices (Volumetric Type) for Underground Flammable Liquid Storage Tanks	4.4.2.1.(5) 4.4.2.1.(10)
ULC	ULC/ORD-C58.14-1992	Non-Volumetric Leak Detection Devices for Underground Flammable Liquid Storage Tanks	4.4.2.1.(5) 4.4.2.1.(10)
ULC	ULC/ORD-C58.15-1992	Overfill Protection Devices for Flammable Liquid Storage Tanks	4.3.1.8.(1)

Table 1.3.1.2. (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
ULC	ULC/ORD-C107.12-1992	Line Leak Detection Devices for Flammable Liquid Piping	4.4.2.1.(11) 4.4.3.5.(2) 4.4.4.2.(1)
ULC	ULC/ORD-C107.21-1992	Under-Dispenser Sumps	4.6.3.2.(1)
ULC	ULC/ORD-C142.5-1992	Concrete Encased Steel Aboveground Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC/ORD-C536-1998	Flexible Metallic Hose	4.5.6.13.(2)
ULC	ULC/ORD-C558-1975	Internal Combustion Engine-Powered Industrial Trucks	3.1.3.1.(2)
ULC	ULC/ORD-C583-1974	Electric Battery Powered Industrial Trucks	3.1.3.1.(3)
ULC	ULC/ORD-C842-84	Valves for Flammable and Combustible Liquids	4.5.7.1.(1)
ULC	ULC/ORD-C971-2005 ⁽⁴⁾	Nonmetallic Underground Piping for Flammable and Combustible Liquids	4.5.2.1.(3) 4.5.6.13.(2)
ULC	ULC/ORD-C1275-84	Storage Cabinets for Flammable Liquid Containers	4.2.10.5.(1)

Notes to Table 1.3.1.2.:

- (1) Code reference is in Division A. (2) Code reference is in Division C.
 (3) ASME A17.1-2007/CSA B44-07 replaces CSA B44-00.
 (4) ULC/ORD-C971-2005 replaces ULC/ORD-C107.4-1992 and ULC/ORD-C107.7-1993.

1.3.2. Organizations**1.3.2.1. Abbreviations of Proper Names**

1) The abbreviations of proper names in this Code shall have the meanings assigned to them in this Article (the appropriate addresses of the organizations are shown in brackets).

- ACGIH American Conference of Governmental Industrial Hygienists
(1330 Kemper Meadow Drive, Cincinnati, Ohio 45240-1634 U.S.A.;
www.acgih.org)
- ANSI American National Standards Institute (25 West 43rd Street, 4th Floor,
New York, New York 10036 U.S.A.; www.ansi.org)
- API American Petroleum Institute (1220 L Street NW, Washington, D.C.
20005-4070 U.S.A.; www.api.org)
- ASME American Society of Mechanical Engineers (22 Law Drive, P.O. Box
2900, Fairfield, New Jersey 07007-2900 U.S.A.; www.asme.org)
- ASTM American Society for Testing and Materials International (100 Barr
Harbor Drive, West Conshohocken, Pennsylvania 19428-2959 U.S.A.;
www.astm.org)
- CAN National Standard of Canada designation (The number
or name following the CAN designation represents
the agency under whose auspices the standard is issued.
CAN1 designates CGA,
CAN2 designates CGSB,
CAN3 designates CSA, and
CAN4 designates ULC.)
- CCBFC Canadian Commission on Building and Fire Codes (National Research
Council of Canada, Ottawa, Ontario K1A 0R6; www.nationalcodes.ca)
- CCME Canadian Council of Ministers of the Environment (360-123 Main
Street, Winnipeg, Manitoba R3C 1A3; www.ccme.ca)
- CGA Compressed Gas Association (4221 Walney Road, 5th Floor, Chantilly,
Virginia 20151-2923 U.S.A.; www.cganet.com)

Appendix A

Explanatory Material

A-1.1.2.1.(1) Objectives and Functional Statements Attributed to Acceptable

Solutions. The objectives and functional statements attributed to each Code provision are shown in tables at the end of each Part in Division B.

Many provisions in Division B serve as modifiers of or pointers to other provisions or serve other clarification or explanatory purposes. In most cases, no objectives and functional statements have been attributed to such provisions, which therefore do not appear in the above-mentioned tables.

For provisions that serve as modifiers of or pointers to other referenced provisions and that do not have any objectives and functional statements attributed to them, the objectives and functional statements that should be used are those attributed to the provisions they reference.

A-1.3.1.2.(1) Where documents are referenced in the Appendices of this Code, they shall be the editions designated in Table A-1.3.1.2.(1).

Table A-1.3.1.2.(1)
Documents Referenced in the Appendices of the National Fire Code of Canada 2005 ♦ ★

Issuing Agency	Document Number	Title of Document	Code Reference
ACGIH	26th Edition	Industrial Ventilation: A Manual of Recommended Practice for Design	A-3.2.7.3.(1)(b)
API	RP 1604-1996	Closure of Underground Petroleum Storage Tanks	A-4.3.15.1.(1)
API	2000-1998	Venting Atmospheric and Low-Pressure Storage Tanks: Nonrefrigerated and Refrigerated	A-4.3.12.8.(1)
API	RP 2003-1998	Protection Against Ignitions Arising out of Static, Lightning and Stray Currents	A-4.7.4.5.
API	2009-2002	Safe Welding and Cutting Practices in Refineries, Gasoline Plants and Petrochemical Plants	A-5.2.3.4.(1)(b)
API	2015-2001	Safe Entry and Cleaning of Petroleum Storage Tanks	A-5.2.3.4.(1)(b)
API	2201-2003	Welding or Hot Tapping on Equipment in Service	A-5.2.3.4.(1)(b)
API	2207-1998	Preparing Tank Bottoms for Hot Work	A-5.2.3.4.(1)(b)
ASTM	D 5-06e1	Penetration of Bituminous Materials	A-4.1.3.1.
ASTM	D 3278-96e1	Flash Point of Liquids by Small Scale Closed-Cup Apparatus	A-4.1.3.1.
CCBFC	NRCC 30619	National Building Code of Canada 1990	A-2.1.2.1.(1)

This Appendix is included for explanatory purposes only and does not form part of the requirements. The numbers that introduce each Appendix Note correspond to the applicable requirements in this Division.

Table A-1.3.1.2.(1) (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
CCBFC	NRCC 47666	National Building Code of Canada 2005	A-1.1.1.1.(1) ⁽¹⁾ A-1.4.1.2.(1) ⁽¹⁾ A-2.1.3.1.(1) A-2.1.3.4.(1) A-2.1.3.6.(1) A-2.7.1.3.(1) A-2.7.1.4.(2) A-2.7.3.1.(1) A-2.9.3.5.(1) A-3.2.2.3.(5) A-3.2.7.9.(1) A-3.2.7.12.(3) A-3.2.9.2.(7) A-4.1.7.1.(1) A-4.2.7.5.(2) A-6.1.1.2.(1)
CCBFC	NRCC 47668	National Plumbing Code of Canada 2005	A-4.1.6.2.(2)
CCME	PN 1326	Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum Products and Allied Petroleum Products	A-4.3.15.1.(1)
CGA	CGA P-1 (2000)	Safe Handling of Compressed Gases in Containers	A-3.1.1.4.(1)(a)
CSA	B139-04	Installation Code for Oil-Burning Equipment	A-4.1.1.1.(3)(b)
CSA	C22.1-06	Canadian Electrical Code, Part 1	A-4.10.3.3.(1) A-5.1.2.1.(1)
CSA	CAN/CSA-C282-05	Emergency Electrical Power Supply for Buildings	A-6.5.1.1.(2)
CSA	Z32-04	Electrical Safety and Essential Electrical Systems in Health Care Facilities	A-6.5.1.1.(2)
CSA	PLUS 2203 (3rd Ed. pub 2001)	Hazardous Locations: A Guide for the Design, Testing, Construction, and Installation of Equipment in Explosive Atmospheres	A-4.1.4.1.(1)
EPA	EPA 530/UST-90/008	Evaluating Leak Detection Methods: Vapor-Phase Out-of-Tank Product Detectors	A-4.4.2.1.(3)
EPA	EPA 530/UST-90/009	Evaluating Leak Detection Methods: Liquid-Phase Out-of-Tank Product Detectors	A-4.4.2.1.(3)
FM Global	Data Sheet 7-50 (2002)	Compressed Gases in Cylinders	A-3.2.8.2.(2)
FM Global	Data Sheet 7-83 (2000)	Drainage System for Flammable Liquids	A-4.1.6.1.(1)
FM Global	Data Sheet 8-8 (2001)	Distilled Spirits Storage	A-3.2.3.3.(2)
HC	Hazardous Products Act, Part II	Workplace Hazardous Materials Information System (WHMIS) of the Hazardous Products Act	A-3.2.7.6.(2) A-3.2.7.13.(1)
HC	SOR/2001-269	Consumer Chemicals and Containers Regulations, 2001	A-3.2.5.2.(1)
HC	SOR/88-66, 1987	Controlled Products Regulations	A-3.2.5.2.(1)
NFPA	FPH1903-2003	Fire Protection Handbook, Nineteenth Edition	A-2.4.1.3.(1)
NFPA	13-2007	Installation of Sprinkler Systems	A-2.1.3.6.(1) A-3.2.1.1.(1)(a) A-3.2.2.4.(3) A-3.2.3.3.(2)
NFPA	15-2007	Water Spray Fixed Systems for Fire Protection	A-4.1.6.1.(1)
NFPA	30-2003	Flammable and Combustible Liquids Code	A-4.1.1.1.(2) A-4.1.3.1. A-4.1.4.1.(1) A-4.1.6.1.(1) A-4.2.7.6.(1) A-4.3.15.1.(1)

Table A-1.3.1.2.(1) (Continued)

Issuing Agency	Document Number	Title of Document	Code Reference
NFPA	30B-2007	Manufacture and Storage of Aerosol Products	A-3.2.5.2.(1)
NFPA	36-2004	Solvent Extraction Plants	A-4.1.1.1.(2)
NFPA	50-2001	Bulk Oxygen Systems at Consumer Sites	A-3.1.1.4.
NFPA	55-2005 ⁽²⁾	Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks	A-3.1.1.4.
NFPA	61-2002	Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities	A-5.3.1.3.(2)
NFPA	80A-2007	Protection of Buildings from Exterior Fire Exposures	A-2.4.1.1.(6)
NFPA	91-2004	Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	A-5.3.1.3.(2)
NFPA	120-2004	Fire Prevention and Control in Coal Mines	A-5.3.1.3.(2)
NFPA	326-2005	Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair	A-5.6.1.13.(3)
NFPA	484-2006	Combustible Metals	A-5.3.1.3.(2)
NFPA	497-2004	Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas	A-4.1.4.1.(1)
NFPA	654-2006	Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids	A-5.3.1.3.(2)
NFPA	655-2007	Prevention of Sulfur Fires and Explosions	A-5.3.1.3.(2)
NFPA	664-2007	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	A-5.3.1.3.(2)
NFPA	705-2003	Field Flame Test for Textiles and Films	A-2.3.2.2.(1)
NRCan		Explosives Act and its Regulations	A-3.2.9.1.(1)
OCIMF	1991	Guide to Purchasing, Manufacturing and Testing of Loading and Discharge Hoses for Offshore Moorings, 4th Edition	A-4.8.8.1.(1)(a)
RMA	IP-2-2003	Hose Handbook, Seventh Edition	A-4.8.8.1.(1)(a)
SFPE	3rd Edition	Handbook of Fire Protection Engineering	A-4.1.6.1.(1)
TC	SOR/2001-286	Transportation of Dangerous Goods Regulations (TDGR)	A-3.2.7.6.(2) A-4.1.2.1. A-4.2.2.3.(2)
TC	SOR/2007-86	Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals	A-4.8.8.1.(1)(a)
ULC	ULC/ORD-C410A-1994	Absorbents for Flammable and Combustible Liquids	A-4.1.6.3.(3)(b)

Notes to Table A-1.3.1.2.(1):

- (1) Code reference is in Division A.
- (2) NFPA 55-2005 replaces NFPA 50A-1999 and NFPA 50B-1999.

A-2.1.2.1.(1) The National Building Code of Canada 1990 introduced changes to the method of determining building height. Application of the current method to existing buildings for the purposes of this Code could result in certain buildings being reclassified as higher buildings. For this reason, the NFC suggests that building height is that which was established by the building code that was applicable at the time of construction in the case of original construction, or at the time of alteration if additional storeys have been added to the building.

A-2.1.2.2.(1) Arena-type buildings are often used for events such as community dances, rallies and trade shows. These events may increase the occupant and fuel loads beyond that for which the space was designed. To ensure safety during such events, additional egress facilities may be required to compensate for the additional occupant load and, in some cases, additional fire suppression measures may be required to compensate for the increased fuel load.

Large public corridors in mercantile occupancies are also used on a temporary basis for community activities, merchandising and for special displays. In these cases, additional egress facilities and fire suppression may be needed, depending on the increase in hazard.

A-2.1.3.1.(1) The National Building Code of Canada is most often applied to existing buildings when an owner wishes to rehabilitate a building, change its use, or build an addition; or when an enforcement authority decrees that a building, or a class of buildings, be altered for reasons of public safety. It is not intended that either the NBC or the NFC be used to enforce the retrospective application of new requirements in the NBC to existing buildings. Although the NFC could be interpreted to require the installation of fire alarm, standpipe and hose and automatic sprinkler systems in an existing building for which there were no requirements before the National Building Code of Canada 2005 was issued, it is the intent of the Canadian Commission on Building and Fire Codes that the NFC not be applied in this manner to these buildings.

It is usually difficult to change structural features of an existing building when undertaking alterations or additions, but the installation of “active” fire protection systems, such as alarms, sprinklers and standpipes, in existing buildings may be possible. These systems may be considered as contributing to an adequate degree of life safety in cases where the structural features of a building do not conform to the NBC.

Sentence 2.1.3.1.(1) is intended to address the installation of fire alarm, sprinkler and standpipe systems in existing buildings presently not so equipped, and in existing buildings that do not provide an acceptable level of safety to meet the current installation standards specified in the NBC. It is not intended that existing fire protection systems that provide an acceptable level of life safety be upgraded with each new edition of the NBC or in conjunction with the inclusion of new requirements not in force at the time that a building was constructed. The authority having jurisdiction is expected to use discretion in enforcing this requirement. The authority having jurisdiction may accept alternatives to strict compliance with the NBC as provided for in Clause 1.2.1.1.(1)(b) of Division A and its Appendix Note. (See also Appendix Note A-1.1.1.1.(1) of Division A and Appendix Note A-1.1.1.1.(1) of Division A of the NBC.)

A-2.1.3.4.(1) Editions of the NBC prior to 2005 permitted the use of combustible sprinkler piping for wet pipe sprinkler systems in residential and light-hazard occupancies on condition that the piping was protected from exposure to a fire in the space beneath. Article 2.1.3.4. requires that the necessary protection of the piping be maintained so that the performance of the sprinkler system will not be compromised in the event of fire. Some of the conditions included restricting use of the piping to light-hazard occupancies, the piping must be a wet system, use of steel suspension grids and correct tile weight, and integrity of the fire protection covering.

A-2.1.3.5.(3)(c) and (d) Concern over the impact of halons on the environment is resulting in changes to the regulations of various agencies that affect their use and release to the atmosphere and their reduction, recycling and eventual phase-out as fire extinguishment agents. Standards referenced in the NFC may not reflect the current status of requirements developed by certain agencies regarding the installation, use and testing of fire suppression systems that employ halons.

A-2.1.3.6.(1) This provision is intended to direct the Code user primarily to Subsection 3.2.5. of Division B of the NBC, which specifies the appropriate standard for the design and installation of automatic sprinkler systems, i.e. NFPA 13, and provides several exceptions and supplementary requirements. On occasion, other provisions in the NBC may also apply. However, where a specific hazard is not addressed by the NBC, such as highly piled storage or the storage of flammable and combustible liquids or rubber tires, the NFC directly references the applicable NFPA standards that contain design criteria for the sprinkler system required.

A-2.1.3.7. This Code requires the installation of several fire safety devices for the control of fire hazards. The inspection, maintenance and testing requirements for many of these devices are referenced in the applicable Articles. However, several Sections of the Code do not include such references for certain fire safety devices, examples of which include, but are not limited to:

- ventilation system interlocks and associated audible alarms for rooms or enclosed spaces containing flammable and combustible liquids (e.g. Subsection 4.1.7.)
- vapour detection alarm systems for rooms or enclosed spaces containing flammable and combustible liquids (e.g. Subsection 4.1.7.)