# **National Fire Code of Canada 2005**

## Errata

### **Issued by the Canadian Commission on Building and Fire Codes**

The table that follows lists errata that apply to the National Fire Code of Canada 2005. Certain pages from the Code have been updated for your convenience; they are provided following the table.

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 errata apply in your province or territory.

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

Provision	Erratum	Date of Issue	
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	
A-1.4.1.2.(1)	The following entry was added after the entry for "Exit:"	07-12-01	
	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.		
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)(I), (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"	07-12-01	
	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"		

#### Table of Errata — National Fire Code 2005

### Table of Errata — National Fire Code 2005 (Continued)

Provision	Erratum	Date of Issue	
Table 5.7.1.1.	Entry for 5.1.1.3.(1): "OS1.12" was changed to "OS1.1"	07-12-01	
	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"		
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 <del>or Facility (</del> OP1), or Protection of Adjacent Buildings <del>or Facilities f</del> rom Fire (OP3)"	07-12-01	

## **Division A**

## Appendix A Explanatory Material

**A-1.1.1.1(1) Application of this Code.** This Code applies to buildings and facilities, whether occupied or vacant. For the purposes of Sentence 1.1.1.1.(1), the term "facilities" is used in its broadest sense to include all premises that are not included in the definition of "building" in this Code, such as outdoor and underground areas, structures and equipment. Such "facilities" are often associated with storage, distribution and manufacturing activities.

The NFC contains references to the National Building Code of Canada 2005 (NBC) for the design, construction and installation of many fire protection features. Some NBC requirements are most readily applied to new buildings and their retroactive application to existing situations as prescribed by this Code could result in some difficulty in achieving compliance. It is the intent of the NFC that an equivalent level of safety be achieved rather than necessarily achieving strict conformance to the NBC. The application of this Code to the upgrading of existing facilities should be based on the judgment of the enforcement authority, who must deal with each case on its own merits.

The NFC states that the owner or the owner's authorized agent is responsible for carrying out the provisions of the Code (see Article 2.2.1.1. of Division C). However, the owner is expected to communicate with the authority having jurisdiction, who is in a position to assess the relative significance of variances from the NBC requirements. Such authority may then determine that upgrading measures are not necessary, on the basis that the existing arrangement represents an equivalent level of fire and life safety. The NFC presumes that the adopting legislation provides for the exercise of the necessary discretionary judgment on the part of the enforcing officials, along with appropriate rights to appeal (see Appendix Note A-2.2. of Division C). See also Appendix Note A-2.1.3.1.(1) of Division B and Appendix Note A-1.1.1.1.(1) of Division A of the NBC.

**A-1.2.1.1.(1)(a) Code Compliance via Acceptable Solutions.** If a building design (e.g. material, component, assembly or system) can be shown to meet all provisions of the applicable acceptable solutions in Division B (e.g. it complies with the applicable provisions of a referenced standard), it is deemed to have satisfied the objectives and functional statements linked to those provisions and thus to have complied with that part of the Code. In fact, if it can be determined that a design meets all the applicable acceptable solutions in Division B, there is no need to consult the objectives and functional statements in Division A to determine its compliance.

**A-1.2.1.1.(1)(b) Code Compliance via Alternative Solutions.** Where a design differs from the acceptable solutions in Division B, then it should be treated as an "alternative solution." A proponent of an alternative solution must demonstrate that the alternative solution addresses the same issues as the applicable acceptable solutions in Division B and their attributed objectives and functional statements. However, because the objectives and functional statements are entirely qualitative, demonstrating compliance with them in isolation is not possible. Therefore, Clause 1.2.1.1.(1)(b) identifies the principle that Division B establishes the quantitative performance targets that alternative solutions must meet. In many cases, these targets are not defined very precisely by the acceptable solutions—certainly far less precisely than would be the case with a true performance code, which would have quantitative performance targets and prescribed methods of performance measurement for all aspects of building performance. Nevertheless, Clause 1.2.1.1.(1)(b) makes it clear that an effort must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B—not "well enough" but "as well as."

In this sense, it is Division B that defines the boundaries between acceptable risks and the "unacceptable" risks referred to in the statements of the Code's objectives, i.e. the risk remaining once the applicable acceptable solutions in Division B have been implemented represents the residual level of risk deemed to be acceptable by the broad base of Canadians who have taken part in the consensus process used to develop the Code.

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.

## A-1.4.1.2.(1)

#### Level of Performance

Where Division B offers a choice between several possible designs, it is likely that these designs may not all provide exactly the same level of performance. Among a number of possible designs satisfying acceptable solutions in Division B, the design providing the lowest level of performance should generally be considered to establish the minimum acceptable level of performance to be used in evaluating alternative solutions for compliance with the Code.

Sometimes a single design will be used as an alternative solution to several sets of acceptable solutions in Division B. In this case, the level of performance required of the alternative solution should be at least equivalent to the overall level of performance established by all the applicable sets of acceptable solutions taken as a whole.

Each provision in Division B has been analyzed to determine to what it applies and what it is intended to achieve. The resultant application and intent statements clarify what undesirable results each provision seeks to preclude. These statements are not a legal component of the Code, but are advisory in nature, and can help Code users establish performance targets for alternative solutions. They are published in the electronic version of the Code and as a separate document entitled "User's Guide – NFC 2005, Application and Intent Statements," which is only available on CD-ROM.

#### Areas of Performance

A subset of the acceptable solutions in Division B may establish criteria for particular types of designs (e.g. certain types of materials, components, assemblies, or systems). Often such subsets of acceptable solutions are all attributed to the same objective: Fire Safety for example. In some cases, the designs that are normally used to satisfy this subset of acceptable solutions might also provide some benefits that could be related to some other objective: Fire Protection of the Building or Facility for example. However, if none of the applicable acceptable solutions are linked to Objective OP1, Fire Protection of the Building or Facility, it is not necessary that alternative solutions proposed to replace these acceptable solutions provide a similar benefit related to Fire Protection of the Building or Facility. In other words, the acceptable solutions in Division B establish acceptable levels of performance for compliance with the Code only in those areas defined by the objectives and functional statements attributed to the acceptable solutions.

#### **Applicable Acceptable Solutions**

In demonstrating that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B, its evaluation should not be limited to comparison with the acceptable solutions to which an alternative is proposed. It is possible that acceptable solutions elsewhere in the Code also apply. The proposed alternative solution may be shown to perform as well as the most apparent acceptable solution, which it is replacing, but may not perform as well as other relevant acceptable solutions. For example, the use of sprinklers to protect the exterior wall of a building may permit combustible materials to be stored closer to that wall than otherwise permitted by the Code, but the proximity of the stored materials to the wall may contravene firefighter access provisions elsewhere in the Code. All applicable acceptable solutions should be taken into consideration in demonstrating the compliance of an alternative solution.

#### A-1.4.1.2.(1) Defined Terms. ◊

#### Exit

Exits include doors or doorways leading directly into an exit stair or directly to the outside. In the case of an exit leading to a separate building, exits also include vestibules, walkways, bridges or balconies.

#### **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.

#### **Fire separation**

A fire separation may or may not have a fire-resistance rating.

## **Division A**

#### Individual storage area

The width of subsidiary aisles providing access to stored products within an individual storage area may be determined by material handling methods, or other criteria such as minimum width for access to exits or fire protection equipment.

#### Service room

Typical examples of service rooms include boiler rooms, furnace rooms, incinerator rooms, garbage handling rooms and rooms to accommodate air-conditioning or heating appliances, pumps, compressors and electrical equipment. Rooms such as elevator machine rooms and common laundry rooms are not considered to be service rooms.

#### Suite

Tenancy in the context of the term "suite" applies to both rental and ownership tenure. In a condominium arrangement, for example, dwelling units are considered separate suites even though they are individually owned. In order to be of complementary use, a series of rooms that constitute a suite must be in reasonably close proximity to each other and have access to each other either directly by means of a common doorway or indirectly by a corridor, vestibule or other similar arrangement.

The term "suite" does not apply to rooms such as service rooms, common laundry rooms and common recreational rooms that are not leased or under a separate tenure in the context of the Code. Similarly, the term "suite" is not normally applied in the context of buildings such as schools and hospitals, since the entire building is under a single tenure. However, a room that is individually rented is considered a suite. A warehousing unit in a mini-warehouse is a suite. A rented room in a nursing home could be considered as a suite if the room was under a separate tenure. A hospital bedroom on the other hand is not considered to be under a separate tenure, since the patient has little control of that space, even though he pays the hospital a per diem rate for the privilege of using the hospital facilities, which include the sleeping areas.

For certain requirements in the NBC, the expression "room or suite" is used (e.g., travel distance). This means that the requirement applies within the rooms of suites as well as to the suite itself and to rooms that may be located outside the suite. In other places the expression "suite, and rooms not located within a suite" is used (e.g., for the installation of smoke and heat detectors). This means that the requirement applies to individual suites as defined, but not to each room within the suite. The rooms "not within a suite" would include common laundry rooms, common recreational rooms and service rooms, which are not considered as tenant-occupied space.

**A-1.5.1.1.(1) Application of Referenced Documents.** Documents referenced in the NFC may contain provisions covering a wide range of issues, including issues that are unrelated to the objectives and functional statements stated in Parts 2 and 3 of Division A respectively; e.g. protection of stored products against damage or loss due to fire. Sentence 1.5.1.1.(1) is intended to make it clear that, whereas referencing a document in the NFC generally has the effect of making the provisions of that document part of the Code, provisions that are unrelated to buildings and facilities or to the objectives and functional statements attributed to the provisions in Division B where the document is referenced are excluded.

Furthermore, many documents referenced in the NFC contain references to other documents, which may also, in turn, refer to other documents. These secondary and tertiary referenced documents may contain provisions that are unrelated to buildings and facilities or to the objectives and functional statements of the NFC: such provisions—no matter how far down the chain of references they occur—are not included in the intent of Sentence 1.5.1.1.(1) of Division A.

#### A-2.2.1.1.(1) Objectives.

#### Listing of objectives

Any gaps in the numbering sequence of the objectives are due to the fact that there is a master list of objectives covering the three principal National Code Documents—the National Building Code, the National Fire Code and the National Plumbing Code—but not all objectives are pertinent to all Codes.

#### The building or facility

Where the term "the building or facility" is used in the wording of the objectives, it refers to the building or facility for which compliance with the National Fire Code is being assessed.



#### Emergency

The term "emergency"—in the context of safety in buildings or facilities—is often equated to the term "fire emergency;" however, the wording of objective OS3.7 makes it clear that the Code addresses any type of emergency that would require the rapid evacuation of the building or facility, such as a bomb threat or the presence of intruders.

#### A-3.2.1.1.(1) Functional Statements.

#### Listing of functional statements

The numbered functional statements are grouped according to functions that deal with closely related subjects. For example, the first group deals with fire risks, the second group deals with emergency egress and response, etc. There may be gaps in the numbering sequence for the following reasons:

- Each group has unused numbers which allows for the possible future creation of additional functional statements within any one group.
- There is a master list of functional statements covering the three principal National Code Documents—the National Building Code, the National Fire Code and the National Plumbing Code—but not all functional statements are pertinent to all Codes.