

## PROPOSED CHANGE

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## MODIFICATION PROPOSÉE

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### Comment

### Commentaires

Document	NBC 2005	Document
Provision	3.2.2.42. to 3.2.2.46.-insert 2010	Exigence
Committee	Fire Protection • Protection contre le feu Use and Egress • Usage et des moyens d'évacuation des bâtiments Housing and Small Buildings • Maisons et petits bâtiments	Comité
Minutes	2005-2 and 2005-3 TG-Residential Care Facilities; 4.6.7. Standing Committee on FP; 5.6.6. Standing Committee on UE and 2005-05 Standing Committee on HSB	Procès-verbaux

### EXISTING PROVISION

None.

### PROPOSED CHANGE as submitted for Public Review in 2008

Insert new Articles 3.2.2.42. to 3.2.2.46. as follows:

Other Code Provisions Affected: None

#### **3.2.2.42. Group B, Division 3, Any Height, Any Area, Sprinklered**

**1)** Except as permitted by Articles 3.2.2.43.-2010 to 3.2.2.46.-2010, a *building* classified as Group B, Division 3 shall conform to Sentence (2).

**2)** Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* shall be *sprinklered* throughout,
- b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,
- c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
- d) *loadbearing walls*, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

#### **3.2.2.43. Group B, Division 3, up to 3 Storeys (Noncombustible), Sprinklered**

**1)** A *building* classified as Group B, Division 3 is permitted to conform to Sentence (2) provided

- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout,
- b) it is not more than 3 *storeys* in *building height*, and
- c) it has a *building area*
  - i) that is not limited if the *building* is not more than 1 *storey* in *building height*,
  - ii) not more than 12 000 m<sup>2</sup> if 2 *storeys* in *building height*, or
  - iii) not more than 8 000 m<sup>2</sup> if 3 *storeys* in *building height*.

**2)** Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

- a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
- b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
- c) *loadbearing walls*, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

#### **3.2.2.44. Group B, Division 3, up to 3 Storeys (Combustible), Sprinklered**

**1)** A *building* classified as Group B, Division 3 is permitted to conform to Sentence (2) provided

- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout.

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- b) it is not more than 3 storeys in building height, and
  - c) it has a building area not more than
    - i) 7 200 m<sup>2</sup> if 1 storey in building height,
    - ii) 3 600 m<sup>2</sup> if 2 storeys in building height, or
    - iii) 2 400 m<sup>2</sup> if 3 storeys in building height.
- 2)** The building referred to in Sentence (1) is permitted to be of combustible construction, and
- a) floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h,
  - b) mezzanines shall have a fire-resistance rating not less than 1 h, and
  - c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

### **3.2.2.45. Group B, Division 3, up to 2 Storeys, Sprinklered**

- 1)** A building classified as Group B, Division 3 is permitted to conform to Sentence (2) provided
- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the building is sprinklered throughout,
  - b) it is not more than 2 storeys in building height, and
  - c) it has a building area not more than
    - i) 2 400 m<sup>2</sup> if 1 storey in building height, or
    - ii) 1 600 m<sup>2</sup> if 2 storeys in building height.
- 2)** The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and
- a) floor assemblies shall be fire separations with a fire-resistance rating not less than 45 min,
  - b) mezzanines shall have, if of combustible construction, a fire-resistance rating not less than 45 min, and
  - c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

### **3.2.2.46. Group B, Division 3, One Storey, Sprinklered**

- 1)** A building classified as Group B, Division 3 is permitted to be of combustible construction or noncombustible construction, used singly or in combination, provided
- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the building is sprinklered throughout,
  - b) it is not more than 1 storey in building height, and
  - c) it has a building area not more than 500 m<sup>2</sup>.

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### **PROPOSED CHANGE accepted and then revised and re-submitted for Public Review in 2009**

**Replace** Subclauses 3.2.2.44.(1)(c)(i), (ii) and (iii) as follows:

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**Other Code Provisions Affected: None**

### **3.2.2.42. Group B, Division 3, Any Height, Any Area, Sprinklered**

- 1)** Except as permitted by Articles 3.2.2.43.-2010 to 3.2.2.46.-2010, a *building* classified as Group B, Division 3 shall conform to Sentence (2).
- 2)** Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and
- a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* shall be *sprinklered* throughout,
  - b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,
  - c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
  - d) *loadbearing walls, columns and arches* shall have a *fire-resistance rating* not less than that required for the supported assembly.

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### 3.2.2.43. Group B, Division 3, up to 3 Storeys (Noncombustible), Sprinklered

- 1) A *building* classified as Group B, Division 3 is permitted to conform to Sentence (2) provided
  - a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout,
  - b) it is not more than 3 *storeys* in *building height*, and
  - c) it has a *building area*
    - i) that is not limited if the *building* is not more than 1 *storey* in *building height*,
    - ii) not more than 12 000 m<sup>2</sup> if 2 *storeys* in *building height*, or
    - iii) not more than 8 000 m<sup>2</sup> if 3 *storeys* in *building height*.
- 2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and
  - a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
  - b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
  - c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

### 3.2.2.44. Group B, Division 3, up to 3 Storeys (Combustible), Sprinklered

- 1) A *building* classified as Group B, Division 3 is permitted to conform to Sentence (2) provided
  - a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout,
  - b) it is not more than 3 *storeys* in *building height*, and
  - c) it has a *building area* not more than
    - i) ~~7 200~~5 400 m<sup>2</sup> if 1 *storey* in *building height*,
    - ii) ~~3 600~~2 700 m<sup>2</sup> if 2 *storeys* in *building height*, or
    - iii) ~~2 400~~1 800 m<sup>2</sup> if 3 *storeys* in *building height*.
- 2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction*, and
  - a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
  - b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
  - c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

### 3.2.2.45. Group B, Division 3, up to 2 Storeys, Sprinklered

- 1) A *building* classified as Group B, Division 3 is permitted to conform to Sentence (2) provided
  - a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout,
  - b) it is not more than 2 *storeys* in *building height*, and
  - c) it has a *building area* not more than
    - i) 2 400 m<sup>2</sup> if 1 *storey* in *building height*, or
    - ii) 1 600 m<sup>2</sup> if 2 *storeys* in *building height*.
- 2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and
  - a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,
  - b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and
  - c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

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### 3.2.2.46. Group B, Division 3, One Storey, Sprinklered

- 1)** A building classified as Group B, Division 3 is permitted to be of *combustible construction* or *noncombustible construction*, used singly or in combination, provided
- except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the *building* is *sprinklered* throughout,
  - it is not more than 1 *storey* in *building height*, and
  - it has a *building area* not more than 500 m<sup>2</sup>.

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## RATIONALE

### Problem

#### General Background

The provinces and territories, through the Provincial-Territorial Policy Advisory Committee on Codes, identified a number of priority tasks that they wished to have addressed in the 2005-2010 code development cycle. One of these was to review and update as needed the code requirements that apply to residential care facilities. Problems with regulating residential care facilities have been recognized for many years. The issue is becoming even more urgent because of demographic changes and the diverging efforts by provinces and territories to find a solution. Work was undertaken to begin to coordinate the national codes and the regulatory needs of the provinces and territories. This proposed change is one of a series that was developed to address the issue.

#### Technical

The existing Articles in Subsection 3.2.2. Building Size and Construction Relative to Occupancy do not recognize the new B3 classification for care occupancies.

#### Justification - Explanation

The Task Group determined it was appropriate to develop a new Group B Div 3 classification. The approach taken was to review the provisions throughout the NBC and NFC related to Groups B-2, B-1 and C and modify, as they deemed appropriate based on the inherent risk to reflect the newly introduced B-3. During this process the TG also considered what other jurisdictions had developed related to care occupancies.

The proposed Articles provide construction and fire resistance rating criteria for buildings classified as Group B, Division 3, care occupancies, depending on building height and size. For buildings more than 3 storeys in building height and of any area, the requirements are identical to the existing requirements for Group B, Division 2 and Group C, residential. This recognizes that B3 occupancies present a level of hazard and require a level of protection between those of B2 and C occupancies.

For buildings not more than 3 storeys in building height, the requirements are the same as those for Group C, residential occupancies, where the building is not more than 3 *storeys* in building height and is sprinklered. This again recognizes that the level of hazard and required level of protection are between those of B2 and C occupancies and that, for smaller buildings of B3 occupancy, the additional protection provided by other requirements in Part 3 for sprinklering and fire alarms allow for some leniency in construction and size limitations.

#### Cost implications

Where B2 requirements are currently being applied, this proposed change would allow combustible construction and 1 h fire separations in low-rise buildings. It is not possible to identify definitive cost implications of the changes proposed to recognize the new B3, care, occupancy. Cost implications, whether increases or decreases, will depend on how individual authorities having jurisdiction are currently applying the Code's requirements to these occupancies.

Where compliance with B2 provisions is currently being required, application of proposed B3 provisions are intended, on the whole, to reduce cost. In the cases where compliance with Group C is currently being required, applying the Group B Div 3 care occupancy may increase cost.

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**Enforcement implications**

Can be enforced within existing regulatory infrastructure.

**Who is affected**

Designers, builders, developers, regulatory officials, community service organizations.

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

**Provision: 3.2.2.42.(1)-2010**  
**Attributions**

**Analysis: Unchanged from 2008**

**Objective**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

**Provision: 3.2.2.42.(2)-2010**  
**Attributions**

**Analysis: Unchanged from 2008**

**Objective**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

**Provision: 3.2.2.43.(1)-2010**

**Analysis: Unchanged from 2008**

**Objective**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

**Provision: 3.2.2.43.(2)-2010**  
**Attributions**

**Analysis: Unchanged from 2008**

**Objective**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

**Provision: 3.2.2.44.(1)-2010**  
**Attributions**

**Analysis:**

**(b),(c)**  
**Objective**

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(1)-2010

Analysis:

Attributions

[\(a\)](#)

Objective

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(1)-2010

Analysis:

Attributions

[\[F02,F04-OS1.2,OS1.3\] Applies to portion of Code text: "... a\) ... the building is sprinklered throughout ..."](#)

Objective

[OS1 Fire Safety](#)

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(1)-2010

Analysis:

Attributions

[\[F02,F04-OP1.2,OP1.3\] Applies to portion of Code text: "... a\) ... the building is sprinklered throughout ..."](#)

Objective

[OP1 Fire Protection of the Building](#)

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(2)-2010

Analysis:

Attributions

Objective

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(2)-2010

Analysis:

Attributions

[\[F03-OS1.2\] \[F04-OS1.2,OS1.3\] Applies to portion of Code text: "...a\) ... floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h, ..." and to Clause \(c\).](#)

Objective

[OS1 Fire Safety](#)

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**OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION**

Provision: 3.2.2.44.(2)-2010

Analysis:

Attributions

[\[F03-OP1.2\] \[F04-OP1.2,OP1.3\] Applies to portion of Code text: "...a\) ... floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h, ..." and to Clause \(c\).](#)

Objective

[OP1 Fire Protection of the Building](#)

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### OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION

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Provision: 3.2.2.44.(2)-2010

Analysis:

Attributions

[\(b\),\(c\) \[F04-OS1.3\]](#)

Objective

[OS1 Fire Safety](#)

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### OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION

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Provision: 3.2.2.44.(2)-2010

Analysis:

Attributions

[\(b\),\(c\) \[F04-OP1.3\]](#)

Objective

[OP1 Fire Protection of the Building](#)

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### OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION

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Provision: 3.2.2.45.(1)-2010

Analysis: Unchanged from 2008

Attributions

Objective

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### OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION

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Provision: 3.2.2.45.(2)-2010

Analysis: Unchanged from 2008

Attributions

Objective

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### OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISION

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Provision: 3.2.2.46.(1)-2010

Analysis: Unchanged from 2008

Attributions

(b),(c)

Objective

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[Comment](#)

[Commentaires](#)