

## **Proposed Ontario Fire Code Amendments: Combustible Furniture Located within Corridors and Lobbies**

### **Background Document for December 7, 2017 Stakeholder Consultation**

In recent years, questions concerning the placement of combustible furniture in corridors and lobbies within a means of egress have been raised by fire services, building owners and occupants following the occurrence of two tragic fatal fires. In both instances, the fires involved the ignition of upholstered furniture located in a corridor of a multi-unit residential building and resulted in multiple deaths.

The primary concern associated with fires involving upholstered furniture is the combustion of polyurethane foam, which is typically used as the padding material. Polyurethane foam is a readily ignitable material that releases heat at a rapid rate and produces copious amounts of smoke and toxic gases.

Currently, Sentence 2.4.1.1.(2) of the Fire Code regulates placement of combustible materials in a means of egress by prohibiting accumulation:

*2.4.1.1.(2) Combustible materials shall not be accumulated in any part of an elevator shaft, ventilation shaft, **means of egress, service room or service space**, unless the location, room or space is designed for those materials.*

As currently written, there are limitations with use of this Sentence for regulating the placement of furniture in corridors and lobbies as elements of the Sentence are interpretive in nature. For example, the amount of combustible furniture that constitutes an "accumulation" is subject to varying opinions amongst owners, inspectors and consultants. Also, establishing criteria for what constitutes an appropriate "design for the area" to permit the placement of combustible furniture is lacking specificity and therefore subject to interpretation.

The subjectivity inherent in Sentence 2.4.1.1.(2) as applicable to placement of furniture, results in challenges regarding consistent application and enforcement across Ontario. In some instances, all combustible furniture within a means of egress has been prohibited while in others limited quantities have been permitted. Inconsistency in application and enforcement of this Fire Code requirement has raised concern among some building owners and occupants, particularly in cases where furniture has been located in these areas for the convenience of building occupants for many years without issue. Furthermore, demographic change particularly associated with an aging population is resulting in an increasing need for "rest spots" along long corridors where residents can pause as they make their way to elevators.

Proposed changes to Articles 2.4.1.1. and 2.4.1.2. are seeking to provide clarity on options for the placement of combustible furniture in corridors and lobbies that form part of a means of egress, promoting both consistent application and increased compliance with Fire Code requirements while also balancing fire safety concerns and occupant convenience.

# PROPOSED CHANGE TO THE 2015 ONTARIO FIRE CODE

(O. Reg. 213/07, as amended current to January 1, 2015)

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**CHANGE NUMBER: N/A**

**CODE REFERENCE: Sentence 2.4.1.1.(2) and Article 2.4.1.2, Division B**

**DESCRIPTION OF PROPOSED CHANGE:**

- Revise Sentence 2.4.1.1.(2) by adding a signpost to Article 2.4.1.2.
- Revise Article 2.4.1.2. to include criteria for all buildings that allows for the placement of furniture in corridors and lobbies that are part of a means of egress.

- Add a new requirement
- Making a technical change to an existing requirement
- Making an editorial/administrative change to an existing requirement

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**EXISTING OFC PROVISIONS**

Subsection 2.4.1. Combustible Materials

***Accumulation of combustible materials***

2.4.1.1. (1) Combustible materials shall not be accumulated in or around a **building** in such quantity or such location as to create a fire hazard.

(2) Combustible materials shall not be accumulated in any part of an elevator shaft, ventilation shaft, **means of egress, service room or service space**, unless the location, room or space is designed for those materials.

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***Furniture in corridors serving guest suites***

2.4.1.2. Despite Sentence 2.4.1.1.(2), corridors serving as **access to exits for guest suites** may contain solid wood or other **approved** furniture, provided the furniture does not create an obstruction to the egress route.

**PROBLEM**

As currently written, there are limitations with use of Sentence 2.4.1.1.(2) for regulating the placement of furniture in corridors and lobbies as elements of the Sentence are interpretive in nature. For example, the amount of combustible furniture that constitutes an “accumulation” is subject to varying opinions amongst owners, inspectors and consultants. Also, establishing criteria for what constitutes an appropriate “design for the area” to permit the placement of combustible furniture is lacking specificity and therefore subject to interpretation. The subjectivity inherent in Sentence 2.4.1.1.(2) as applicable to placement of furniture, results in challenges regarding consistent application and enforcement across Ontario.

## PROPOSED OFC CHANGE

### Subsection 2.4.1. Combustible Materials

#### ***Accumulation of combustible materials***

2.4.1.1. (1) Combustible materials shall not be accumulated in or around a **building** in such quantity or such location as to create a fire hazard.

(2) **Except as provided in Article 2.4.1.2.**, combustible materials shall not be accumulated in any part of an elevator shaft, ventilation shaft, **means of egress, service room or service space**, unless the location, room or space is designed for those materials.

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#### ***Furniture in corridors serving guest suites***

~~2.4.1.2. Despite Sentence 2.4.1.1.(2), corridors serving as access to exits for guest suites may contain solid wood or other approved furniture, provided the furniture does not create an obstruction to the egress route.~~

#### ***Furniture in corridors and lobbies***

2.4.1.2.(1) Furniture may be located in lobbies, **public corridors**, corridors serving sleeping rooms and corridors used by the public, that are part of a **means of egress** provided

- (a) the furniture is constructed of solid wood or noncombustible materials,
- (b) the furniture
  - (i) complies with California Technical Bulletin 133, "Flammability Test Procedure for Seating Furniture for Use in Public Occupancies" and
  - (ii) is affixed with a label or provided other documentation confirming its compliance,
- (c) the furniture area is **sprinklered**,
- (d) where furniture is located in a corridor, the furniture area is separated from the means of egress by a **fire separation** that is at least equivalent to the existing corridor **fire separation**,
- (e) where furniture is located in a lobby, the lobby is separated by a **fire separation** from those portions of the corridor that provide direct access to **suites**, provided
  - (i) the **fire separation** is at least equivalent to the existing corridor **fire separation**, and
  - (ii) an alternate **means of egress** is provided for the **suite** occupants so that they can evacuate the **building** without passing through the lobby, or
- (f) the furniture is **approved**.

(2) **Closures** in the **fire separations** in Clauses (1)(d) and (e) shall have a minimum 20 min. **fire-protection rating** and be equipped with self-closing and latching devices.

(3) Where furniture is located in corridors referred to in Sentence (1), a minimum clear width of

- (a) 2400 mm shall be maintained in a corridor serving patients in a hospital,

- (b) 1650 mm shall be maintained in a corridor serving non-ambulatory residents in a Group B, Division 2 or 3 **occupancy**, and
  - (c) 1100 mm in all other corridors.
- (4) Where furniture in compliance with Clauses 2.4.1.2.(1)(b), (c), (d) or (e) is located in corridors or lobbies referred to in Sentence (1),
- (a) a **smoke detector** connected to the fire alarm system shall be installed in the furniture area if the **building** has a fire alarm system, or
  - (b) a **smoke alarm** shall be installed in the furniture area if the **building** does not have a fire alarm system.

### **RATIONALE FOR CHANGE**

- The proposed change introduces various options for owners that allow for furniture placement in corridors and lobbies that form part of a means of egress.
- The change is required to address concerns raised by stakeholders regarding inconsistent Fire Code application and enforcement regarding furniture placement in corridors and lobbies.

### **IMPACT**

- Owners will be provided with clear options for the placement of furniture in corridors and lobbies in a means of egress.
- Some owners may face costs to upgrade furniture or building features if they choose to place furniture in such areas.
- The prescribed options will provide improved clarity for Fire Code application and enforcement purposes.

### **OBJECTIVE BASED ANALYSIS OF THE CHANGE OR NEW PROVISION**

To be provided.

### **FUNCTIONAL STATEMENT(S) AND LINK(S) TO OBJECTIVE(S)**

To be provided.

# PROPOSED CHANGE TO THE 2015 ONTARIO FIRE CODE

(O. Reg. 213/07, as amended current to January 1, 2015)

## CHANGE NUMBER:

CODE REFERENCE: Table 1.2.1.A., Division B

## DESCRIPTION OF PROPOSED CHANGE:

Add new reference to Technical Bulletin 133 in Table 1.2.1.A.

- Add a new requirement
- Making a technical change to an existing requirement
- Making an editorial/administrative change to an existing requirement

## EXISTING OFC PROVISIONS

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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)

## PROBLEM

Need to reference a new standard based on revisions to Article 2.4.1.2.

## PROPOSED OFC CHANGE

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ASTM	E1515-07	Standard Test Method for Minimum Explosible Concentration of Combustible Dusts	1.4.1.2. of Division A (Minimum explosible concentration)
<u>State of California Department of Consumer Affairs,</u>	<u>Technical Bulletin 133, January 1991</u>	<u>Flammability Test Procedure for Seating Furniture for Use in Public Occupancies</u>	<u>2.4.1.2.(1)(c)</u>

<a href="#"><u>Bureau of Home Furnishings and Thermal Insulation</u></a>			
CGA	P-1-2008	Safe Handling of Compressed Gases in Containers	5.6.1.1. (3)

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**RATIONALE FOR CHANGE**

Need to add a new standard to Table 1.2.1.A as a reference for new furniture flammability requirements under proposed new Clause 2.4.1.2.(1)(c).

**IMPACT**

None.

**OBJECTIVE BASED ANALYSIS OF THE CHANGE OR NEW PROVISION**

To be determined.

**FUNCTIONAL STATEMENT(S) AND LINK(S) TO OBJECTIVE(S)**

To be determined.