# **Proposed Change 1845**

Heating, Ventilating and Air

Conditioning

Code Reference(s):	NBC20 Div.B 9.29.5.2. (first printing)		
Subject:	Other — Fire Protection		
Title:	Introduction of References to Standards Related to Gypsum Board to Article 9.29.5.2.		
Description:	This proposed change introduces references to two standards that are already referenced elsewhere in the NBC to Article 9.29.5.2., ASTM C1177/C1177M, "Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing," and ASTM C1658/C1658M, "Standard Specification for Glass Mat Gypsum Panels."		
Related Code Change Request(s):	CCR 1801		
Related Proposed Change(s):	PCF 1846		
This change could potentially affect the following topic areas:			
Division A		$\checkmark$	Division B
Division C		$\checkmark$	Design and Construction
Building operations		$\checkmark$	Housing
Small Buildings		$\checkmark$	Large Buildings
Fire Protection			Occupant safety in use
Accessibility			Structural Requirements
Building Envelope			Energy Efficiency

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# Problem

Several common Type X gypsum board products are available on the market and used across Canada. However, Article 9.29.5.2. of Division B of the NBC currently references only two standards for Type X gypsum board. This results in a limited selection of Type X gypsum board products that can be used to comply with the requirements of Subsection 9.29.5. If the list of gypsum board standards referenced in Article 9.29.5.2. is not updated, it will continue to limit the flexibility of design and construction.

Plumbing

Sites

Construction and Demolition

The current edition of the NBC needs to be updated to reflect the standardized industry language and gypsum products that are currently used in Canada.

# Justification

This proposed change would introduce references to two Type X gypsum board standards to Article 9.29.5.2., ASTM C1177/C1177M, "Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing," and ASTM C1658/C1658M, "Standard Specification for Glass Mat Gypsum Panels." These two standards are already referenced elsewhere in the NBC 2020, and referencing them in Article 9.29.5.2. is not expected to result in any conflicts.

This proposed change would permit Type X gypsum board with glass mat facer to be used in high-moisture environments where paper-faced products are not appropriate. This proposed change would also improve flexibility in the design and construction of buildings since more options would be available to Code users.

# **PROPOSED CHANGE**

#### [9.29.5.2.] 9.29.5.2. Materials

- **[1] 1)** Gypsum products shall conform to
  - [a] a) ASTM C1178/C1178M, "Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel", or
  - [b] b) ASTM C1396/C1396M, "Standard Specification for Gypsum Board", except that the *flame-spread rating* of gypsum board shall be determined in accordance with CAN/ULC-S102, "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies",
  - [c] --) <u>ASTM C1177/C1177M, "Standard Specification for Glass Mat</u> <u>Gypsum Substrate for Use as Sheathing," or</u>
  - [d] --) ASTM C1658/C1658M, "Standard Specification for Glass Mat Gypsum Panels."

### Impact analysis

No additional costs are expected to be incurred as a result of adding references to these two standards to Article 9.29.5.2. The proposed change would simply add more options. Formally including more gypsum board products as desired by the construction industry will simplify enforcement and allow the use of gypsum board products that are more appropriate to the end use.

# **Enforcement implications**

This proposed change can be enforced by the existing infrastructure. Since the two additional standards are already referenced in the NBC 2020, the industry and regulators are familiar with the products conforming to these standards. As such, no additional training is anticipated to be necessary for Code users. Formally including more gypsum board products as desired by the construction industry will simplify enforcement of the Code.

# Who is affected

Builders, consumers, manufacturers, regulators, designers, contractors and building owners.

### **OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS**

[9.29.5.2.] 9.29.5.2. ([1] 1) [F20,F80-OP2.1,OP2.3] [F22,F80-OP2.4] [9.29.5.2.] 9.29.5.2. ([1] 1) [F20,F80-OS2.1,OS2.3] [9.29.5.2.] 9.29.5.2. ([1] 1) [F20,F22,F80-OS1.2] [9.29.5.2.] 9.29.5.2. ([1] 1) [F20,F22,F80,F81-OH1.1,OH1.2]