TECHNICAL SAFETY BC

INFORMATION BULLETIN

ENCAPSULATED MASS TIMBER CONSTRUCTION AND THE ELECTRICAL CODE

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The following bulletin provides guidance on the application of the BC Electrical Code with respect to the construction types in the BC Building Code. This document was created in consultation with the Province of British Columbia's Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing, and other professionals. The requirements of local building or electrical authorities having jurisdiction may vary. Designers and installers should consult with local authorities having jurisdiction, prior to undertaking work, to determine their requirements. The City of Vancouver Building By-law should be consulted when working within that jurisdiction.

Topic: Encapsulated Mass Timber Construction (EMTC) and the wiring methods required under the BC Electrical Code.

In British Columbia, the design and construction of EMTC buildings is regulated by the British Columbia Building Code (BCBC). The electrical equipment installed within those buildings is regulated by the British Columbia Electrical Code (BCEC) and the installation must follow the wiring methods prescribed by the BCEC.

EMTC was introduced as a new construction type within Revision 2 of the 2018 BCBC on December 12, 2019. The BCBC now identifies three main construction types: combustible construction, encapsulated mass timber construction, and non-combustible construction. EMTC buildings are permitted under the following new BCBC Articles:

Article 3.2.2.48EMTC. Group C, up to 12 Storeys, Sprinklered

Article 3.2.2.57EMTC. Group D, up to 12 Storeys, Sprinklered

The BCBC restrictions that apply to buildings of non-combustible construction also apply to EMTC buildings (with limited exceptions), as stated in this BCBC Sentence: "Except as otherwise provided in this Part . . . materials used in a building or part of a building permitted to be of encapsulated mass timber construction shall conform to Subsection 3.1.5. [section that addresses non-combustible construction]*"* (3.1.18.2. Materials permitted).

EMTC is similar to non-combustible construction as per BCBC Article 3.1.18.2. For the purposes of compliance with the BCEC non-combustible wiring methods shall be used.

Summary
EMTC buildings, designed and constructed according to the provisions of BCBC Articles 3.2.2.48EMTC. and 3.2.2.57EMTC., are interpreted to be non-combustible construction for the application of the BC Electrical Code.

Vicky Kang
Manager, Energy
Provincial Safety Manager, Electrical

References:
BC Electrical Code
BC Building Code