


BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0035

INTERPRETATION

Page 1 of 1

Interpretation Date:	December 17, 2019
Building Code Edition:	BC Building Code 2018
Subject:	Fire Protection of Emergency Electrical Conductors
Keywords:	Emergency Power, Fire Separations
Building Code Reference(s):	3.2.7.9, 3.2.7.10
Question:	<p>Sentence 3.2.7.9.(1) requires a minimum 2 h power supply from an emergency generator for certain building systems in some types of buildings. Is this intended to supersede the requirement of Sentence 3.2.7.10.(2) for a 1 h fire separation for emergency electrical conductors?</p>
Interpretation:	<p>No.</p> <p>Sentence 3.2.7.9.(1) requires an emergency power supply from a generator to operate under full load for at least 2 h for the systems specified in that Sentence.</p> <p>Sentence 3.2.7.10.(1) summarizes the different applications for emergency electrical conductors, in Clauses (a) through (c). Sentence 3.2.7.10.(2) requires the emergency conductors identified in Clauses 3.2.7.10.(1)(a) and (b) to either provide a circuit integrity rating of at least 1 h in conformance with CAN/ULC-S139, or to be located in a service space that is separated from the remainder of the building by fire separations of at least 1 h.</p> <p>Sentence 3.2.7.9.(3) refers to similar requirements for the emergency conductors identified in Clause 3.2.7.9.(1)(c), which are for mechanical systems that serve areas of refuge in hospitals and similar facilities, or contained use areas, but the required minimum circuit integrity rating or fire separation is 2 h instead of 1 h.</p> <p>Many of the conductors identified in Sentence 3.2.7.10.(1) are also part of the systems referenced in Sentence 3.2.7.9.(1) as requiring a 2 h emergency power supply from a generator. Since most of these conductors are specifically referenced in Sentences 3.2.7.10.(1) and (2) as requiring 1 h circuit integrity or 1 h fire separation, they do not require 2 h circuit integrity or 2 h fire separation. The generator is still required to supply emergency power for at least 2 h but this does not change the required circuit integrity rating or fire-resistance rating of the fire separation.</p> <p></p> <p>Patrick Shek, P.Eng., CP, FEC, Committee Chair</p>

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.