Fire Department Response Time

Background
The BC Building Code uses different criteria to establish spatial separation requirements for unsprinklered buildings, depending on the response time of a fire department. Where the response time, measured according to the parameters in this bulletin and the BC Building Code, exceeds 10 minutes in 10% or more of the calls to the building, requirements related to limiting distance may be affected.

How do I determine fire department response time?
For the purpose of the application of Clauses 3.2.3.1.(8)(a), 9.10.14.3.(1)(a) and 9.10.15.3.(1)(a) of the BC Building Code, fire department response time shall be considered to be the time from the receipt of notification of a fire by the fire department, to the arrival, at the building or building site, of the first firefighting vehicle that is staffed and equipped to fight a fire for the purpose of limiting the exposure to adjacent buildings.

This bulletin is only intended to address the measurement of fire department response time for application of Clauses 3.2.3.1.(8)(a), 9.10.14.3.(1)(a) and 9.10.15.3.(1)(a) of the BC Building Code.

When do I start measuring and when do I stop?
Measurement of fire department response time starts when the fire department receives notification, and does not include the time it takes for 911 or other dispatch services to relay the call to the fire department. Response time ends when the first firefighting vehicle arrives at the building or building site, and does not include additional set-up time for the vehicle or crew.

The estimated response time should be determined for the specific building site and not an average for the general community. The response time should be determined using present, factual information and circumstances. Fire department response time does not need to account for potential future impacts such as increased traffic congestion or road closures.
What is a ‘firefighting vehicle?’

A firefighting vehicle is one that has integral firefighting equipment and does not include support vehicles, such as pickup trucks or other passenger vehicles.

Do I need to be familiar with NFPA 1710?

The reference to NFPA 1710 in Appendix note A-3.2.3.1.(8) is intended to provide commentary on the measurement of response time based on 90% of actual response times. NFPA 1710 is not a referenced standard in the BC Building Code and there is no expectation that performance requirements in NFPA 1710 be met.

Code references:

3.2.1.3.(8)(a) the time from receipt of notification of a fire by the fire department until the arrival of the first fire department vehicle at the building exceeds 10 min in 10% or more of all fire department calls to the building, and

9.10.14.3.(1)(a) the time from receipt of notification of a fire by the fire department until the first fire department vehicle arrives at the building exceeds 10 min in 10% or more of all calls to the building, and

9.10.15.3.(1)(a) the time from receipt of notification of a fire by the fire department until the first fire department vehicle arrives at the building exceeds 10 min in 10% or more of all calls to the building, and