



## **BULLETIN RB06-041**

(Updated 2015 Dec 18)

### **DETACHED GARAGES SERVING TWO TO FOUR DWELLING UNITS**

**Reference: Sentence 9.10.15.5.(4) and Section 9.32.**

**Sentence 9.10.15.5.(4)** "The requirements regarding fire-resistance rating, type of construction and type of cladding shall not apply to the exposing building face of a dwelling unit facing a detached garage or accessory building, where

- a) the detached garage or accessory building serves only one dwelling unit,
- b) the detached garage or accessory building is located on the same property as that dwelling unit, and
- c) the dwelling unit served by the detached garage or accessory building is the only major occupancy on the property."

**Section 9.32.** "Ventilation"

#### **Question:**

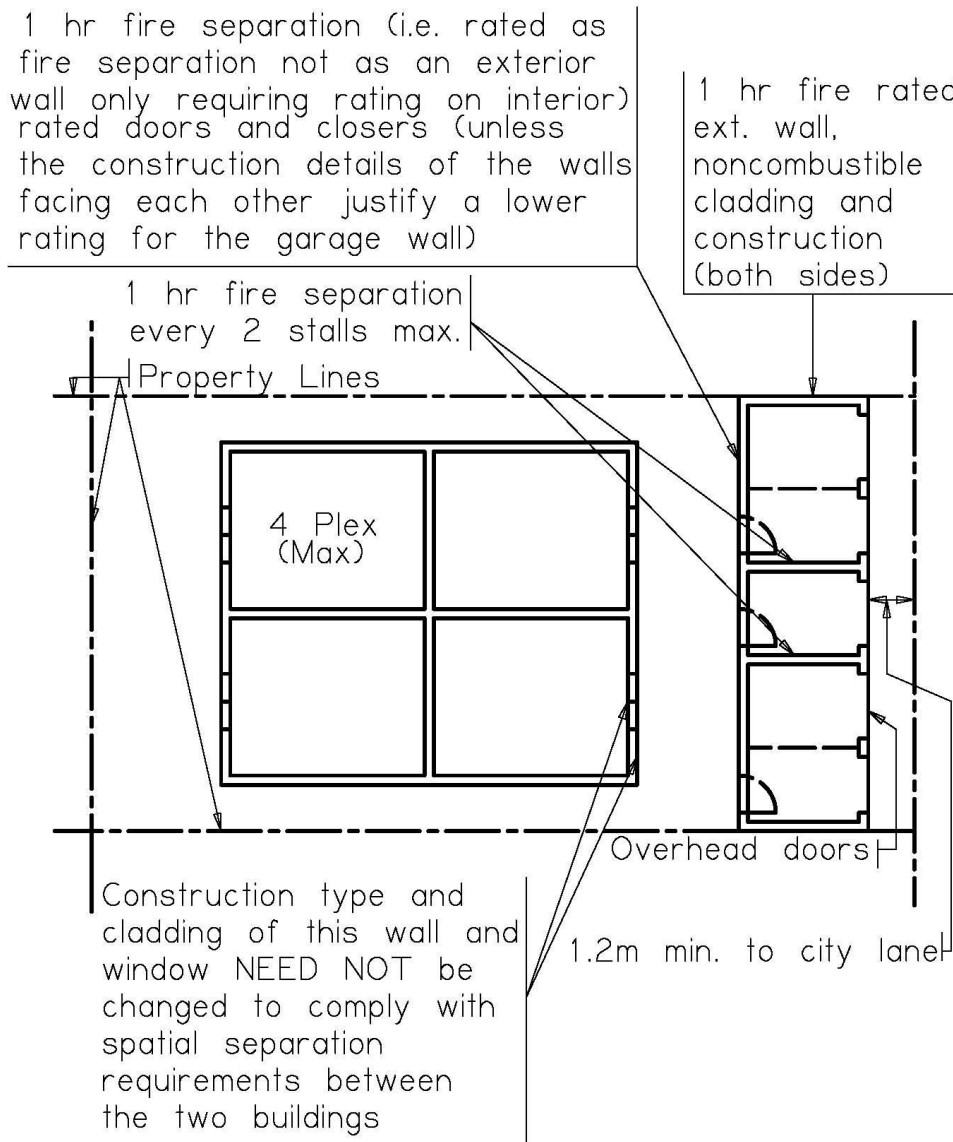
Although the above Sentence applies only to detached garages serving only one dwelling unit, we are often faced with similar situations with detached garages serving multiple dwelling units, up to and including fourplexes. What are the guidelines for these situations?

#### **Commentary / Relevant Facts / Conclusion:**

The spatial separation between the residential building and the multi-family garage usually is unable to comply with requirements of the Code. As a related issue, the window openings of the residential building facing the garage may be too large although they may comply with the Code were the garage absent.

Another possible issue is that the spatial separation of the multi-family garage facing the city lane may not comply with the Code due to the large unprotected opening sizes of the garage doors, usually about 70%.

Given below is a sketch of a typical situation allowable for a multi-car garage serving a fourplex residential building.



The main points of the concept are:

- a) One hour fire separations are used to subdivide the storage garage into smaller fire compartments so that each 2 car space (maximum) between fire separations is equivalent to a typical garage in a single dwelling unit (although the two vehicles may be owned by two families in a multi-family building).
- b) The external cladding and wall construction adjacent to the property line shall conform to spatial separation requirements of **Subsection 9.10.15**.

- c) The limiting distance requirements between the garage and the residential building is assumed to be resolved as the garage wall facing the residential building is fire rated to one hour, including 45 min rated doors and closures.(See sketch for details)
- d) The windows of the residential building facing the garage need not be reduced in size for the same reason.
- e) The wall of the garage facing the city lane can be treated in the same way as a single family garage and spatial separation relaxations in the Code for that type of garage apply.
- f) All requirements of **Section 9.32** for ventilation shall be enforced.

This equivalency approach meets the intent of the ABC 2006 without compromising fire safety.

**Note:** As an alternative to subdividing the garage at every 2 stalls, it may be sprinklered using

- a) a dry system or an approved antifreeze system or
- b) a wet system if the garage is heated.

The installation shall be certified by an approved sprinkler installer that it conforms to **NFPA 13**.

All other requirements shown in the sketches still apply.

This Regulation Bulletin only applies to buildings containing a maximum of up to four dwellings.

Chief Building Inspector

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Unless stated otherwise, the Code references in this bulletin are to Division B of the Alberta Building Code 2014 (ABC 2014). Bulletins do not overrule the ABC 2014 nor constitute a relaxation of the Code. They serve to clarify the Code in areas where the latter is ambiguous or does not cover a specific topic. Bulletins are City of Calgary clarifications for staff use to enable consistency in the application of the Code. These bulletins should always be read in the context of the appropriate requirements of the Code.