



Southwest
New Brunswick
Service Commission

Apartment/duplex/hotel exit stairs and decks

The exit requirements for correct construction of exits from second-storey residential suites (duplexes, apartments, hotels) can be particularly complicated. It's important a property owner or builder understand the requirements before work is undertaken, be it new work, or a repair of an existing assembly.

It's important to understand that *replacing an existing structure with a similar new construction can lead to a whole lot of problems*: an existing deck or staircase may not meet modern codes, and replacing "like with like" can lead to a violation: call us before you start work to avoid problems!

Simply put, the National Building Code is structured to provide incentive for above-ground suites to be served by two separate exits. In situations where an above-ground suite is served by only one exit, especially if that exit is an exterior stair or deck, Code makes things both more complex and often, more costly. Consequently, in a lot of Code regarding platforms and stairs, the phrase "only means of egress" or "separate means of egress" is common. (A "separate means of egress" means an enclosed exit stairway, door leading to ground level, stairs leading to ground level, exterior exit passageway, or a fire escape [only allowed on pre-existing buildings.])

Let's break down the relevant various Code snippets one by one.

9.10.8.8: This section of Code requires all exterior passageways used as a means of egress to have a 45-minute fire-resistance rating in residential buildings. (It exempts single-family houses, offices, stores and light industrial operations of two storeys in height, or situations where a residential suite is not located above another). A passageway is any length of platform - and also means a deck, if a portion of the deck must be traversed to exit a suite.

9.9.9.2: If a door from an apartment, hotel, or multi-unit complex (triplex, etc) opens onto an exterior passageway, and that passageway is the only means of egress from that suite, the passageway must offer two separate paths of escape. What this means is that if an apartment has a door opening to a deck and that door is the only way out of the apartment, the deck has to be served by two sets of stairs - usually one at each end.

9.9.9.3: If a passageway (ie: deck, elevated platform) is 1.5m off the ground or more, and serves more than one suite (apartment unit, hotel suite, etc.) then one of the following conditions must apply:

- The suites served by that exterior passageway must have a separate means of egress (exit), or
- The passageway must have two separate sets of stairs.

Further, if suites are located one on top of the other, the passageway and all of its supporting elements must have a 45-minute fire resistance rating. (This is somewhat superfluous, given 9.10.8.8)

9.9.4.2(5): All of the above assumes a passageway that is largely open – ie: at least 50 per cent of the vertical area - to the air. If the passageway is walled in more than that, then the walls demising the passageway and the rest of the building must also be constructed as fire separations.

9.9.4.4: This line of code intends to protect exterior stairs (and ramps) from the potential of being exposed to fire from other compartments (suites.) Essentially, it states that if an unenclosed exit stair is the only means of egress from a suite, the windows of adjacent suites within 3m (9ft) horizontally and either 10m (30ft) below or 5m (15) above the exit stair have to be either wired glass in steel frames or glass block. From a design standpoint, this means that exit stairs should be placed so they are not exposed to windows. One approach is to make sure the stairs are 3m away from the closest wall of the building: essentially by building a deck that's 3, away from the wall, and then having stairs come off the deck at that point. Similar language exists for the protection of fire escapes.