



Washington State Building Code Council
Improving the built environment by promoting health, safety and welfare

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STATE BUILDING CODE INTERPRETATION 17-23

CODE: 2015 International Building Code

SECTION: 504, Building Height and Number of Stories

2012 International Building Code Section 504.3: *“For Group R-1 and R-2 occupancies in Type VA Construction equipped throughout with an approved automatic fire sprinkler system in accordance with Section 903.3.1.1, the maximum number of stories permitted in Section 504.2 may be increased by one, provided the interior exit stairways and ramps are pressurized in accordance with Section 909.20 and 909.11.”*

2015 International Building Code Section 504.4.1: *“For Group R-1 and R-2 occupancies in buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the maximum number of stories permitted in Section 504.2 may be increased by one provided the interior exit stairways and ramps are pressurized in accordance with Section 909. Legally required standby power shall be provided for buildings constructed in compliance with this section and be connected to stairway shaft pressurization equipment, elevators and lifts used for accessible means of egress, hoistway pressurization equipment (if provided) and other life safety equipment as determined by the authority having jurisdiction. For the purposes of this section, legally required standby power shall comply with 2014 NEC Section 701.12, options (A), (B), (C), (D), (F), or (G) or subsequent revised section number(s).”*

QUESTION 1: Is the intent for Section 504.4.1 to require all of Section 909 to apply to R-1 and R-2 structures of VA construction with occupied floors located less than 75 ft above the lowest level of fire department vehicle access?

ANSWER: **No. Only the provisions found in IBC Section 909 that apply to pressurized exit stairways and pressurized exit ramps are applicable.**

QUESTION 2: Is the intent for Section 504.4.1 to require all of Section 909 to apply to R-1 and R-2 structures of VA construction with floor levels used for human occupancy not more than 30 feet below the finished floor of the lowest level of exit discharge?

ANSWER: **No. The intent of IBC Section 504.4.1 is to apply only the portions of Section 909 that apply to pressurized exit stairways and pressurized exit ramps when the story increase allowed by Section 504.4.1 is utilized.**

QUESTION 3: Is the intent for Section 504.4.1 to include shaft pressurization for elevator hoistways used for means of egress in lieu of elevator lobbies?

ANSWER: **No. IBC Section 504.4.1 does not require pressurization of elevator hoistways regardless of whether or not elevator lobbies are present in the design.**

QUESTION 4: Is the intent for Section 504.4.1 to require special inspection by a person with expertise in fire protection engineering, mechanical engineering, and certification as air balancers; for erection of ductwork and prior to concealment for purposes of leakage testing and recording go device location, and prior to occupancy after sufficient completion for purposes of pressure difference testing, flow measurements, and detection/control verification?

ANSWER: **Yes. IBC Section 909.6.3 requires that pressurized stairways comply with Section 909. Accordingly, the special inspection provisions of Section 909.3 would be applicable to pressurized stairways. While Section 909.6.3 is silent regarding pressurized ramps the special inspection requirements of Section 909.3 would also be applicable to pressurized exit ramps. Section 909 requires that pressurized stairways and pressurized exit ramps undergo special inspections and tests sufficient to verify the proper commissioning of the smoke control design in its final installed condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to such inspections and tests.**

QUESTION 5: Is the intent of Section 504.4.1 to require fire detection wiring to be fully enclosed within raceways in Type VA Construction?

ANSWER: **No. It is not the intent of Section 504.4.1 to require fire detection wiring to be within raceways; however, if other code provisions require such raceways, raceways shall be employed where the code provisions require them.**

SUPERSEDES: None

REQUESTED BY: City of Bothell