Can the core switch be placed in a stairwell



Overview

Egress and Access Control: Understanding Stairwell This remote release must be controlled by a single switch, and a communication system within the stairwe.

Key Takeaways

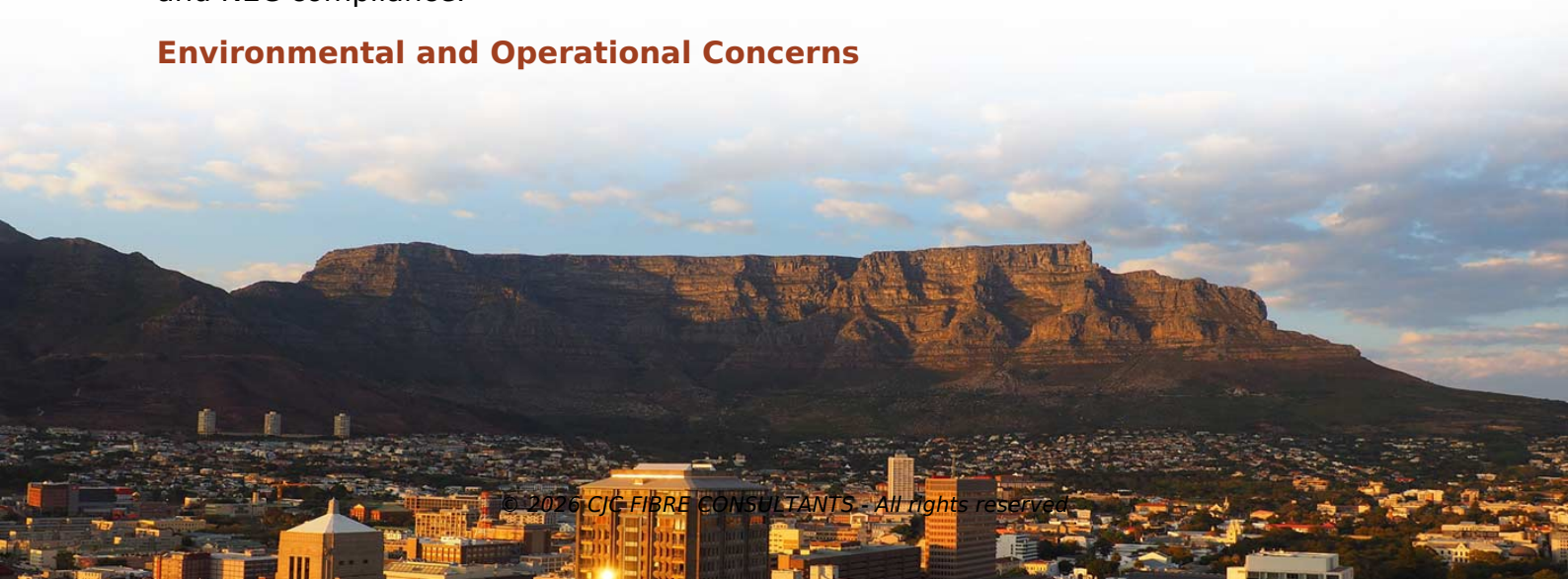
Placing a core network switch in a stairwell is generally not recommended due to safety, accessibility, and code compliance concerns.

Safety and Code Considerations

Stairwells are typically designed as emergency egress routes and may be part of a building's fire-rated core, which includes stairs, elevators, and service risers. Installing a network switch in this space could obstruct the required clearances, interfere with emergency evacuation, and violate building or fire codes. Electrical equipment like panelboards cannot be installed over stair steps, and working space in front of equipment must be maintained.

These rules imply that placing a switch in a stairwell could compromise both safety and NEC compliance.

Environmental and Operational Concerns



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Core switches require controlled environmental conditions, including proper ventilation, temperature, and humidity. Stairwells are often poorly ventilated, subject to temperature fluctuations, and may accumulate dust, which can reduce the reliability and lifespan of networking equipment. Additionally, stairwells are not designed for regular maintenance access, making it difficult for IT staff to safely service the switch.

Practical Alternatives

Dedicated Network Room or Closet: The best practice is to place core switches in a secure, climate-controlled room with proper rack space and cable management. Service Cores or Utility Rooms: If a central location is needed, consider a service core or mechanical room that is designed to house electrical and network equipment safely. Avoid Egress Paths: Never place critical equipment in emergency exit routes or stairwells, as this can create hazards and violate building codes.

Summary

While technically a switch could be mounted in a stairwell if clearances are maintained, it is strongly discouraged due to fire safety, accessibility, and environmental concerns. The recommended approach is to use a dedicated network room or service core that meets electrical, cooling, and maintenance requirements, ensuring both safety and operational reliability.

Article Content

Egress and Access Control: Understanding Stairwell

This remote release must be controlled by a single switch, and a communication system within the stairwell must be included to support occupant safety and

Core (architecture)

A core may include staircases, elevators, electrical cables, water pipes and risers. A core allows people to move between the floors of a building, and distributes services efficiently to the floors.

Pocket Guide to Stairwell AOVs

It is common practice to locate manual switches for firefighters to use at the entry and uppermost levels of a stairwell. These are required to override all other control modes to provide emergency access.

Panels Under Stairs | Information by Electrical Professionals for ...

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Certainly can''t add a new panel to that location, nor will most AHJ''s allow you to upgrade that one and leave it in that same position. I don''t know when NEC started prohibiting such install

Can an electrical panel be located under stairs?

While not specifically excluded by the National Electrical Code (NEC), there are two code standards that a panel must comply with to be located under a stair: 1) The under-stair space is

Where do I put switches and sockets for safety and aesthetics?

Whether it''s a light switch at the top or bottom of a staircase, the one near the main door or at the entrance to the dressing area or any other room in the house, it''s always a good idea to

Where does a switch at the bottom of a staircase need to be?

So it doesn''t have to be at any particular spot at the basement level ... but it would be best that it''s intuitive. I personally suggest keeping it as close as possible to the bottom of the stair, so that it''s

Understanding Building Core Design | PDF | Elevator | Stairs

The document discusses building cores, which are the central service areas of multistory buildings that contain functions like staircases, elevators, restrooms, and mechanical systems.

Electrical panels in rated stairwell

This is not intended to prohibit a door or stairway being used as part of normal circulation patterns, such as the exit doors also serving as entrances, or using the stairway to move between

Can an electrical panel be located at a stair landing?

We have inspected condo units with the panel at the top landing of a stair and compliant with the service access requirement, but positioned so that, if you stepped backwards from the panel

Electrical panels in rated stairwell

I have a renovation on an existing 3 story, type 3B construction, R-2 six unit apartment building. The owner wants to put electrical panels in the rated stairwell. Can not find anything in NEC

Panelboard on Stairs, Wireway Clearance and More

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Can you help? The term “metal wireway” is defined in Article 100 as sheet metal troughs with hinged or removable covers for housing and protecting electrical wires and cable and in which

Can an electrical panel be located under stairs?

• Can an electric panel be located in a closet? • Can an electric panel be located in a bathroom? • What causes copper wires to turn green or black in an electric panel? • What is the

Staircase Wiring circuit diagram & working – Mechatrofice

Staircase wiring is a common multi-way switching or two-way light switching connection; it involves wiring for one light with two switches. In this setup, a single lamp is controlled by two

Positioning Switches & Receptacles On A Wall

Positioning Switches & Receptacles On A Wall If your home improvement project is adding an addition, finishing a basement or performing any major remodel that involves the addition of electrical

Code Q&A

A. In dwelling units, not less than one wall switch-controlled lighting outlet must be installed [210.70 (A) (2) (a)]. Where the stairway between floor levels has six risers or more, a wall switch must be located

Stairwell 3-Way Switches | Information by Electrical Professionals for ...

JFletcher said: Im gonna say that 2 lights on two separate spst switches doesnt meet code. For a stairwell? One SPST switch at the top and one at the bottom controlling two separate

Panels Under Stairs | Information by Electrical Professionals for ...

I believe I am safe, but I am still questioning this. The building is not providing me the room required to mount the equipment in a room. I have two panels located under a staircase. Does

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