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# Temporarily Occupied Enclosures

*Figure 1 Representative example*

**What codes pertain to temporarily occupied enclosures in commercial buildings?**

Where a fire sprinkler system is either required by code or elected to be installed by the occupant and/or building owner, NFPA 13 provides most of the specific details on where fire sprinkler coverage is required. Although NFPA 13 has previously exempted certain spaces that are only temporarily occupied, such as electrical closets or certain cabinetry and furniture, the 2022 Edition of NFPA 13 expands this exemption slightly to include "temporarily occupied enclosures."

**What is a temporarily occupied enclosure?**

A temporarily occupied enclosure is any small enclosure, under 24 square feet of footprint, that allows a person to occupy the space but only for a brief period of time. There is an emerging trend to offer individuals a small site-built or pre-manufactured enclosure as a privacy enclosure for phone conversations or web-based video meetings for a single occupant. In this respect, it is similar to a phone booth but conceptually updated for individually-carried mobile devices or embedded screens and cameras instead of a fixed-mounted hard-wired telephone.

The key word in the term to enjoy the exemption under NFPA 13 is "temporarily". The challenge is to allow their use for short periods of time while not affording their misuse as routinely occupied work stations or alternate uses such as storage. As a temporary space intended for use similar to a phone booth, the amount of time the enclosure is occupied is not only limited, but the activities the enclosure supports are narrow in scope.

**Does the temporarily occupied enclosure have to be sprinklered?**

That depends. If the building is not required to have a fire sprinkler system, there would no requirement to sprinkler the enclosure nor install a sprinkler system in the building due to the enclosure.

If the enclosure is to be used inside of a sprinklered building, the following conditions must all be met to exempt the enclosure from having sprinkler protection directly installed:

- The enclosure shall not to a height less than 18" from the horizontal plane projected below sprinkler head coverage.
- The enclosure shall not have any means of storage, including drawers, bins or open areas under any fixed or built-in seating (excluding pedestal mounted seating).
- The enclosure shall not have any 110V or larger voltage outlets within the enclosure. USB outlets are permitted.
- The enclosure shall be less than 24 square feet of actual footprint projected vertically to the floor from any point of the exterior surface of the enclosure.
- The enclosure shall be positioned in a fixed position and shall have sprinkler heads located on the walls or ceiling of the room on all four sides of the enclosure. If the enclosure is physically abutted against a wall, no additional sprinkler head is required for that surface plane.
- Enclosures must be isolated. Spacing between any two enclosures shall not be less than the spacing of successive sprinkler heads in that same direction.

**Does a louvered or self-opening ceiling make any difference?**

Possibly. If the ceiling is open or louvered and has no means of closing, the enclosure would only be subject to additional sprinkler coverage if the existing sprinkler system coverage was obstructed by the booth to the extent that coverage of the area was no longer adequate.

If the enclosure has a ceiling that mechanically opens and closes either by manual, automated or actuated means, the enclosure would be considered to have a fixed closed ceiling for code evaluation purposes.

**What constitutes storage in a temporarily occupied enclosure?**

Storage is the placement of any furniture, electronics, charging device, box or collection of items (containerized or loose) that are not in direct and routine use within that space.

**Can a temporarily occupied enclosure have power?**

For use in a sprinklered building the enclosure can have power for built-in lighting or electronics, along with a maximum of two (2) USB outlets for powering portable handheld devices. Traditional 110V outlets are prohibited. The power must be sourced from a hard-wired power source protected by a circuit breaker or via a tethered cord hard wired into the enclosure on the enclosure side with a standard plug that will plug into traditional outlets. An extension cord is not permitted.

If the enclosure is in a non-sprinklered building, there is no prohibition on the presence of a 110V outlet. The power must still be sourced from a hard-wired power source protected by a circuit breaker or via a tethered cord hard wired into the enclosure on the enclosure side with a standard plug that will plug into traditional outlets. An extension cord is not permitted.

**Why can't a temporarily occupied enclosure in a sprinklered building have a 110V outlet?**

Our inspectors routinely find overloaded or daisy-chained items on outlets in commercial office space. It is common to find 1000W or 1500W portable electric resistance heaters in personal workspaces and battery charging power supplies for portable electric devices. These items are often left powered and unattended. Outside of an enclosure in a sprinklered building, the sprinkler system would suppress the fire quickly before the fire grew significantly. In a temporary enclosure, the contents of the enclosure are typically plastics and glued wood products. These would easily become fully involved prior to activation of the sprinkler system, presenting a much larger concentrated fire load than a typical sprinkler head in an office building is designed to suppress.

**Does a temporarily occupied enclosure require a fire alarm device?**

If the building has a fire alarm device, possibly yes. Fire alarm systems must be designed so that the fire alarm is audible by at least 15dB above ambient average noise or sound levels. The fire alarm will be activated and sound levels within the enclosure will be tested once installed to ensure that this condition is met. If the sound levels within the enclosure are not sufficient, installation of a fire alarm device within the enclosure is one possible solution, along with relocation or the addition of a notification device near but outside of the enclosure.