

## Modular Booth Proposal

### New Section 202 definition (both IBC and IFC – definitions scoped to IBC General committee):

**MODULAR BOOTH.** An occupiable prefabricated enclosed space 16. Sq. ft. or less consisting of walls and a ceiling, with or without an integrated floor, which is intended for indoor use, and may include integral electrical wiring and furnishings.

**MODULAR ROOM.** An occupiable prefabricated enclosed space greater than 16 square feet, with or without an integrated floor, or furnishings, designed and manufactured for use as an office, or privacy space, which is equipped with *means of egress*, lighting and *ventilation*, and fire protection features. These are also known as “room in room”.

**SLEEP POD.** A- *modular booth or modular room* that is designed and used for sleeping purposes.

### New IFC Section 320

#### 320 MODULAR BOOTHS, MODULAR ROOMS, and SLEEP PODS

**320.1 General.** *Modular booths, modular rooms, and sleep pods* installed inside occupancies covered by this code shall comply with Section 429 of the *International Building Code*.

### New IBC Section 429 (or 430)

#### SECTION 429

##### MODULAR BOOTHS, MODULAR ROOMS, and SLEEP PODS

**429.1 General.** *Modular booths, modular rooms, and sleep pods* installed inside occupancies covered by this code shall comply with Sections 429.2 through 429.8.

*Sleep pods* shall comply with section 429.2 through 429.9.

**429.2 Size limitations.** *Modular rooms* shall not exceed 100 sq. feet (9.3 m<sup>2</sup>) in floor area and 8 feet (2438 mm) in height.

**Exception:** Prefabricated structures in excess of these dimensions shall comply with applicable construction requirements in this code.

**429.3 Listing.** *Modular rooms, modular booths, and sleep pods* shall be *listed and labeled* in accordance with UL 962 and installed in accordance with the listing and the manufacturer's installation instructions.

**429.4 Interior finish.** Finish materials on the interior and exterior surfaces of *modular booths, modular rooms and sleep pods* shall comply with the applicable requirements in Chapter 8 of this code and the International Fire Code.

**429.5 Plastics.** Plastics materials used in floor, wall, and ceiling construction shall comply with the applicable requirements in Chapter 26 of this code.

**429.6 Locations.** *Modular booths, modular rooms and sleep pods* shall be installed in *approved locations* and shall not obstruct required *means of egress*.

**429.7 Automatic fire suppression.** An *automatic fire sprinkler system* shall be installed within *modular rooms and sleep pods* in accordance with Section 903.3.1.1 or 903.3.1.2.

**Exception:** An automatic fire sprinkler system is not required for any of the following.

1. *Modular rooms* installed in a building not requiring an automatic sprinkler system.
2. Within *modular rooms and sleep pods* where fire sprinklers are permitted to be omitted in accordance with Section 903.3.1.1 or 903.3.1.2.

**429.7.1. Sprinkler Clearance.** A clearance of not less than a 3-foot (914 mm) shall be maintained below the building's automatic fire sprinklers and above the top of the *modular booths, modular rooms, or sleep pods*.

**Exception:** Clearance shall not be required when automatic sprinkler suppression is provided within the booth, room, or pod.

**429.8 Fire detection and annunciation.** Automatic fire detection and alarm notification appliances shall be provided in *modular rooms, modular booths, and sleep pods* in accordance with Section 907.2. Automatic smoke detection that activates the occupant notification system shall be installed in all of the following locations.

1. Common spaces outside of *sleep pods*.
2. All interior corridors serving *sleep pods*.
3. Where required by the *building official* automatic fire detection and automatic notification appliances, interconnected to the buildings fire alarm system, shall be provided within the *sleep pod*.

**429.9 Egress.** *Modular booths and modular rooms* shall comply with Chapter 10 of this code.

**Exception:** *Modular booths and modular rooms* not required to be an *accessible space* in accordance with Chapter 11 shall be permitted to have an elevation change measured from the finished floor that is a maximum of 5 inches (127 mm)

higher than the floor of the existing structure outside the *modular room* or *modular booth* provided a sign is installed on each side of the door warning about the elevation change, and a distinctive marking stripe is installed across the threshold having a width of not less than 1 inch (25 mm) but not more than 2 inches (51 mm).

**429.10 Sleep pods.** *Sleep pods* shall also comply with the following:

1. Individual *sleep pods* shall not exceed 16 sq. feet (3.3 m<sup>2</sup>) in floor area, 8 feet (2438 mm) in height and 4 ft (1219 mm) in width.

**Exception:** *Sleep pods* provided with automatic fire sprinklers within each individual sleep pod.

2. *Sleep pods* shall only be permitted for use in *fire areas* which are provided with an *automatic fire sprinkler system* installed in accordance with Section 903.3.
3. Where building smoke detection is not required to be installed within the *sleep pod* in accordance with Section 429.8, single or multiple station smoke alarms shall be installed in each individual sleep pod in accordance with Section 907.2.10.
4. Where *approved* by the *building official*, *sleep pods* shall be permitted to be installed in other than Group R and Group I occupancies.
5. The total number of *sleep pods* installed in a single *fire area* shall not to exceed 10 percent of the *fire area* of the *story* in which they are located.

**Exception:** where a special investigation, acceptable to the *building official*, has demonstrated adequate fire safety.

6. *Sleep pods* shall only be stacked when allowed by the manufacturer's instructions and their listing.
7. Where multiple sleep pods are grouped together, a maximum of four *sleep pods* cumulatively shall be placed adjacent to one another in any one group. There shall be a minimum of 10 feet horizontal separation to additional groups of *sleep pods* provided.

**Exceptions:**

1. Groups of *sleep pods* provided with an *automatic sprinkler system* within each individual sleep pod.
2. Groups of *sleep pods* separated by a one hour rated fire barrier in accordance with Section 707.
3. A special investigation, acceptable to the *building official*, has demonstrated adequate fire safety.

**Reason:**

This proposal covers limited size modular booths, rooms, and sleeping pods, such as those shown below. These booths, rooms, and sleeping pods are being treated as products that can be installed in a building, and not as building construction. Specific requirements address the following:

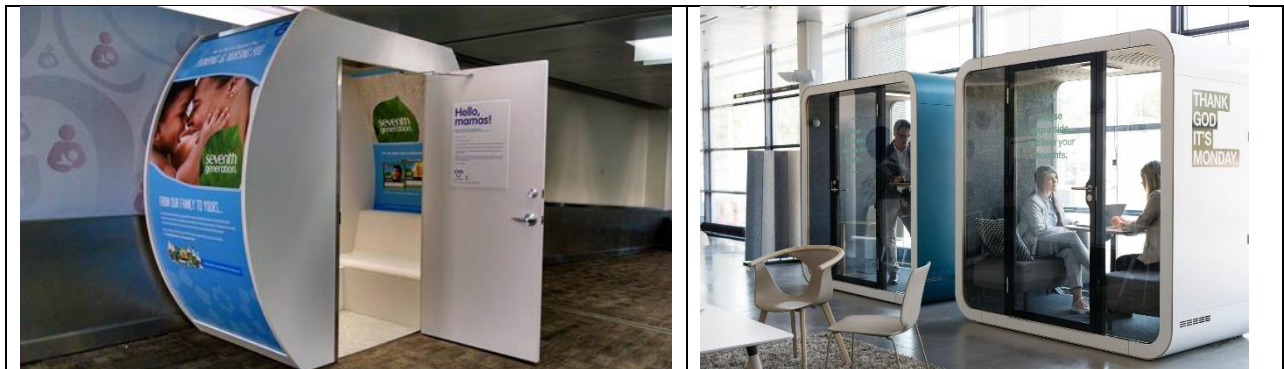
The UL 962 listing will cover the safety of the modular booth, rooms, and sleeping pods, and internal wiring devices and other construction. Among other things the listing evaluates the safety of the internal wiring, plumbing and other construction features.

The code official can approve the locations in which, modular rooms, booths and sleeping pods, is to be installed, which allows the flexibility to take into consideration the occupancy in which the modular booth, rooms, and sleeping pods, is to be installed, the size of the booth, rooms, and sleeping pods, and it's features and intended usage.

The modular room is required to be located so that spacings to automatic sprinklers are maintained, the building official is given the authority to not require automatic suppression within the modular rooms in excess of 4 ft in width if allowed by NFPA 13.

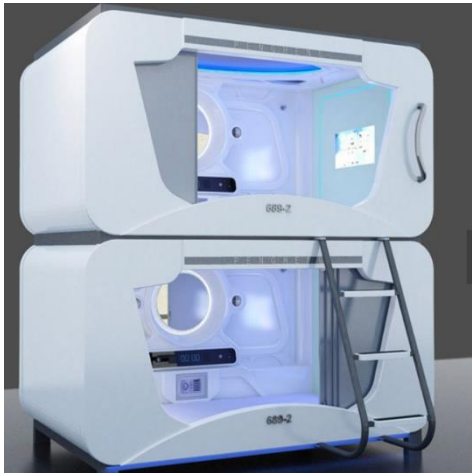
This proposal also covers sleep pods, a type of modular room, that are showing up on more occupancies such as airports and office buildings. The proposal allows the code official the authority to approve the installation of sleep pods in specific locations, and the number of sleep pods to be installed. Minimum safety requirements are also required for these pods.

In addition to the requirements proposed for this section, the code official can also apply other code requirements related to the installation of the product, such as obstructions to the means of egress or automatic detection connected to the buildings alarm system.





Sleep pods in Dubai airport



**Cost Impact:** The cost of these construction should not increase significantly if Listed, since there is a safety standard for these types of products.