

INFORMATION NEEDED BY PFA TO PRODUCE AN OCCUPANT LOAD SIGN

Occupant load purposes:

Occupant load calculation is the process of determining the maximum number of people that a building, room, or space can accommodate safely. This calculation is typically based on building codes, which consider factors such as the floor area, means of egress, and fire safety. The purpose of occupant load calculation is to ensure the safety of the occupants in case of an emergency, such as a fire. The calculation takes into account the use of the space, the occupancy classification, and the design and construction of the building. The number of occupants is used to determine the minimum number of exits, the width of exits, the size of fire suppression systems, and other safety features that must be provided.

Function of the Space:

- Choose the function from the list (2024 IFC Table 1004.5) that most closely matches the use of the space. The occupant load factor shown for each function will be used to calculate the occupant load.

Gross vs. net areas: Note whether the occupant load factor is based on gross or net area, as you will need to enter either the gross or net square footage of the space.

- Gross floor area is measured within the inside surface of the walls and includes all occupiable and non-occupiable spaces. Bathrooms, closets, electrical/mechanical rooms, and other non-occupiable spaces are not subtracted from the gross floor area.
- Net floor area is based on the actual occupied area. Non-occupiable spaces like corridors, stairs, bathrooms, electrical/mechanical rooms, closets, and fixed equipment are subtracted from the total area to determine the net floor area.

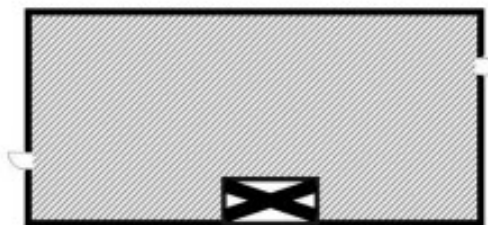


Figure 1. Gross floor area

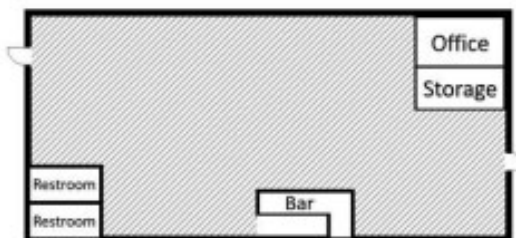


Figure 2. Net floor area

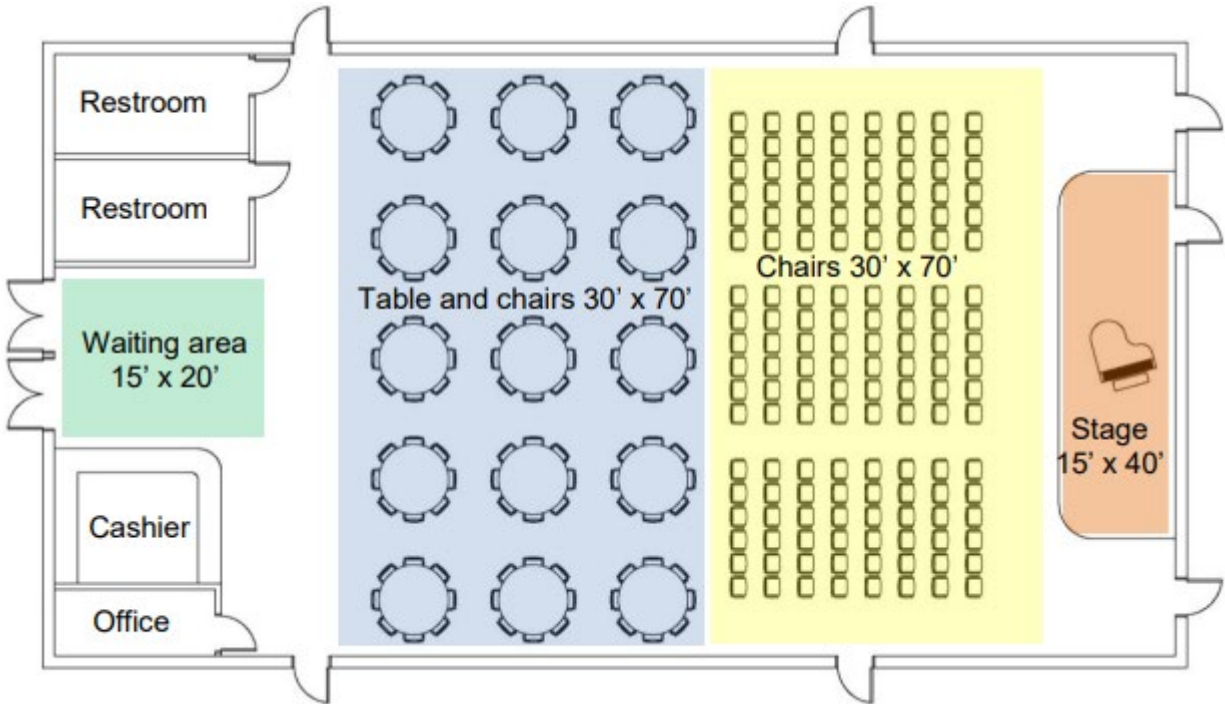
Please submit the following for review and analysis:

- Square footage of space and use.
- Floor plan of room or building in question, drawn to scale or adequately dimensioned.
- Indicate all seating.
- Show the location of all exit doors from the individual room and from the building.
- Indicate the width of exit doors and corridors.
- Show the direction of door swing (in the direction of egress or not).

- Indicate the type of door hardware (panic hardware, knobs, levers).
- Indicate where the exit signs are located and if emergency exit lighting is provided.
- Indicate path of egress all the way to the public way.
- Outside exit discharge must be illuminated.

Occupant load determination:

- The following is an example of an assembly venue with multiple uses. The occupant load is determined by measuring the areas, dividing by the occupant load factors for each area, and adding the numbers together.



Replacement signs or signs with new business names can be produced more efficiently if an existing Occupancy Load Sign is submitted. After assembling the above-mentioned information, you should submit it to PFA at plans@poudre-fire.org.