

## Occupant Load Factors for Office Use

**DATE** October 14, 2026

**CATEGORY** Egress

**SUBJECT** Occupant Load Factor Selection for Group B Business Areas

**PURPOSE** Provide guidance for selecting and documenting occupant load factors in office tenant improvements, including distinguishing Business and Assembly uses and applying gross and net area calculations.

### REFERENCE

1. San Francisco Building Code, Current Edition
  - a. Table 1004.5
  - b. Section 1004.5 (occupant load calculation)
  - c. Section 1004.6 (fixed seating)
  - d. Section 1004.8 (concentrated business)

## Discussion

### 1. Business versus Assembly

The classification should be based on the intended use and expected occupant density, not solely based on the room name shown on the plans.

**Generally Business functions under SFBC Table 1004.5:** Office work areas, open office desking areas, private offices, huddle rooms, focus rooms, small collaboration rooms used by office occupants, casual soft seating areas used for informal office collaboration, coffee counters serving the office area, reception areas, circulation areas, restrooms, and similar spaces that support the normal business office function.

**Generally Assembly functions under SFBC Table 1004.5:** Conference rooms, training rooms, all hands areas, multipurpose rooms, large break rooms, cafeteria or dining seating areas, banquette seating areas, and similar spaces where occupants gather for meetings, presentations, dining, events, or other assembly type activities.

### 2. Gross Floor Area versus Net Floor Area

Occupant load factors in SFBC Table 1004.5 are expressed as either gross floor area or net floor area, depending on the listed function of the space. The distinction is important because the selected factor determines what overall area is included in the occupant load calculation.

**A gross occupant load factor** is applied to the gross floor area assigned to that function. Gross floor area generally includes the floor area within the inside surface of the surrounding walls without deduction for corridors, toilet rooms, closets, thickness of interior walls and other and similar spaces. These supporting spaces are not deducted when the

applicable occupant load factor is stated as gross. The specific room or space under consideration shall have the calculated occupant with fractions rounded up to the next whole number.

**A net occupant load factor** is applied only to the actual occupied area for that function. Net floor area excludes portions of the floor area that are not normally occupied as part of the function being calculated, such as corridors, stairs, toilet rooms, mechanical rooms, electrical rooms, closets, fixed equipment, and similar nonoccupiable or support areas. For example, an assembly area calculated at a net factor should be based on the seating, standing, dining, or gathering area itself, rather than the larger surrounding tenant area.

For office tenant improvements, Business areas are typically calculated using a gross factor, while many Assembly areas are calculated using net factors. As a result, the code plans should clearly distinguish the gross Business area from the net Assembly areas. The Business gross area may include Assembly support spaces that serve the Business function. Assembly net areas should be measured based on the specific room or portion of the plan used for gathering, meeting, training, dining, or standing, with the applicable Table 1004.5 factor selected based on the proposed furniture layout and function.

### 3. Typical Business Area versus Concentrated Business Area

**Typical business office areas:** The 150 gross occupant load factor should generally be used for typical office areas that function as a normal business office environment. Typical business office areas may include open office desking, private offices, team work areas, focus rooms, small huddle rooms, copy areas, file areas, reception areas serving the office, coffee points, internal circulation, restrooms, and similar support spaces.

“When the code prescribes an occupant load factor of 150 gross for business use, it is not saying that each person in an office must be provided with at least 150 square feet of working space. Rather, it is saying that, for egress purposes, at least one person must be assumed to be present for each 150 square feet of floor area in the business use.”  
(International Code Council).

A typical office may include dense desk clusters in some portions of the plan while also including meeting rooms, focus rooms, support spaces, circulation, break areas, and other office amenities. These normal features do not make the office a concentrated business use unless the overall character of the area is more comparable to the high density business uses described in SFBC Section 1004.8.

Small huddle rooms, focus rooms, quiet rooms, phone rooms, and similar collaboration rooms may be treated as part of the business office function when they are intended for temporary use by occupants of the surrounding office area. These rooms are generally different from conference rooms because their principal function is short term collaboration, privacy, or focused work by occupants already assigned to the office area.

The office area should be calculated at 150 square feet per occupant unless adequate documentation supports a higher than typical office occupant load.

**Concentrated business use areas:** SFBC Section 1004.8 applies to concentrated business use areas. These are unique business use areas with a higher density of occupants than would normally be expected in a typical business occupancy environment. The code examples include telephone call centers, trading floors, electronic data processing centers, and similar business use areas.

Where approved, the occupant load for a concentrated business use area is based on the actual occupant load, but not less than one occupant per 50 square feet of gross occupiable floor space.

The concentrated business use method should be considered when the area has characteristics similar to the examples in Section 1004.8. Indicators may include:

1. The operation is similar to a call center, trading floor, electronic data processing center, dispatch center, operations floor, or other area where a high number of occupants are expected to be present in a compact work environment. The area is primarily designed for high density workstations with limited support space, limited circulation relief, and limited employee amenity space within the area.
2. The proposed layout is desk heavy and does not include private office areas, collaboration rooms, break areas, lounge areas, or other normal office support spaces within the tenant area. Workstations are arranged at a density that suggests the actual occupant load may substantially exceed the occupant load calculated at 150 gross square feet per occupant for the business area. A small individual desk footprint does not automatically make an area concentrated business use because the 150 gross factor is applied to the full business area, not to the desk footprint alone.
3. The project narrative or furniture plan indicates that the space will have a high assigned seat count, significant shift overlap, heavy hoteling use, or substantial public demand. This may occur in a multi-floor tenant space where shared amenities or assembly areas are concentrated on certain floors, leaving portions of other floors with denser office desking and limited support space.

#### 4. Unconcentrated Assembly Area versus Concentrated Assembly Area

Assembly occupant load factors in a standard office should be based on the actual furniture arrangement and how the space is intended to be used. Where a conference room, break room, or similar space is arranged with tables and chairs, the assembly occupant load is typically calculated using the “tables and chairs” factor of 15 net square feet per occupant per SFBC Table 1004.5. This applies where occupants are seated at tables for meetings, dining, or similar functions. Where the same type of space is arranged with chairs only,

without tables, the more concentrated assembly factor of 7 net square feet per occupant should be used because the seating arrangement allows a higher occupant density. This could be common in an event space, multipurpose room or all hands space.

Where fixed seating is provided, including benches, banquettes, booths, or similar built in seating, the occupant load should be determined in accordance with SFBC Section 1004.6 rather than by applying a floor area occupant load factor. Fixed seats are counted based on the number of seats provided. For fixed seating without dividing arms, the occupant load is based on not less than one occupant for each 18 inches of seating length. For seating booths, the occupant load is based on one occupant for each 24 inches of booth seat length measured at the backrest. The plans should clearly identify the furniture layout, whether tables are provided, whether seating is fixed or movable, and the resulting occupant load calculation so the basis for the assembly occupant load is clear and consistent

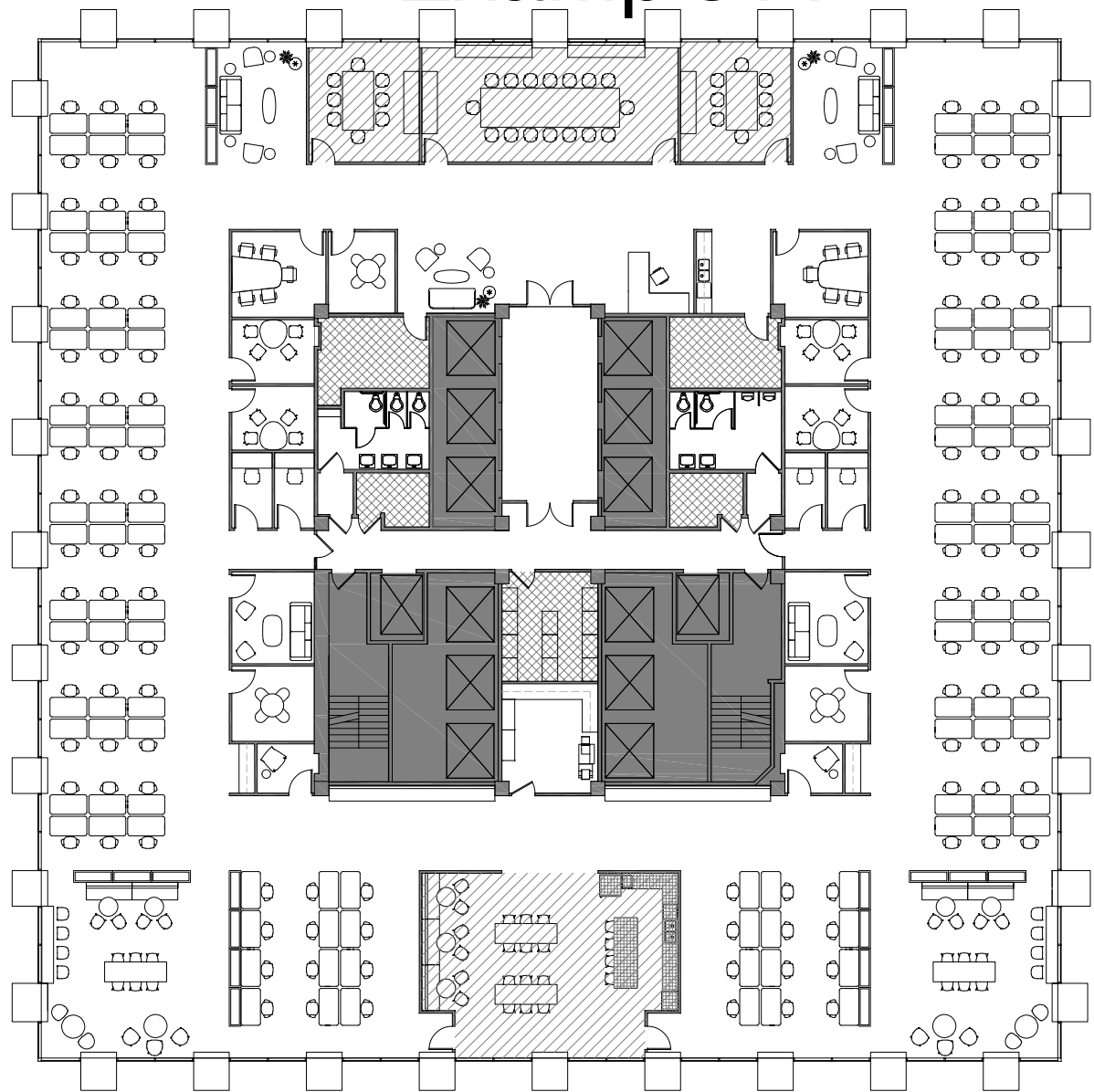
## 5. Additional Considerations

**Other space functions:** Areas that are not part of the normal Business office function or an Assembly gathering function should be calculated using the specific occupant load factor assigned to that function in SFBC Table 1004.5. For example, storage areas are generally calculated at 300 gross square feet per occupant.

**Temporary events:** The approved occupant load and approved use shown on the permit documents establish the basis for normal operation of the tenant space. Events that exceed the approved occupant load, or introduce temporary activities such as large gatherings, entertainment, food service, temporary stages, tents, or similar event conditions may require separate temporary event approvals or operational permits. San Francisco provides event permitting guidance through SF.gov and the Permit Center.

**Unique floor plates for pre-application coordination:** Unique floor plates, unusually dense tenant layouts, large shared amenity areas, significant public access, or mixed Business and Assembly functions may warrant early coordination with SF DBI before permit submittal. SF DBI Administrative Bulletin AB-028 provides the procedure for requesting a pre-application plan review meeting to obtain review and comment on specific code issues before a permit application is submitted. Where the occupant load approach depends on interpretation of Business, concentrated Business, Assembly, or mixed function areas, a pre-application meeting may help establish the review basis before the design is finalized.

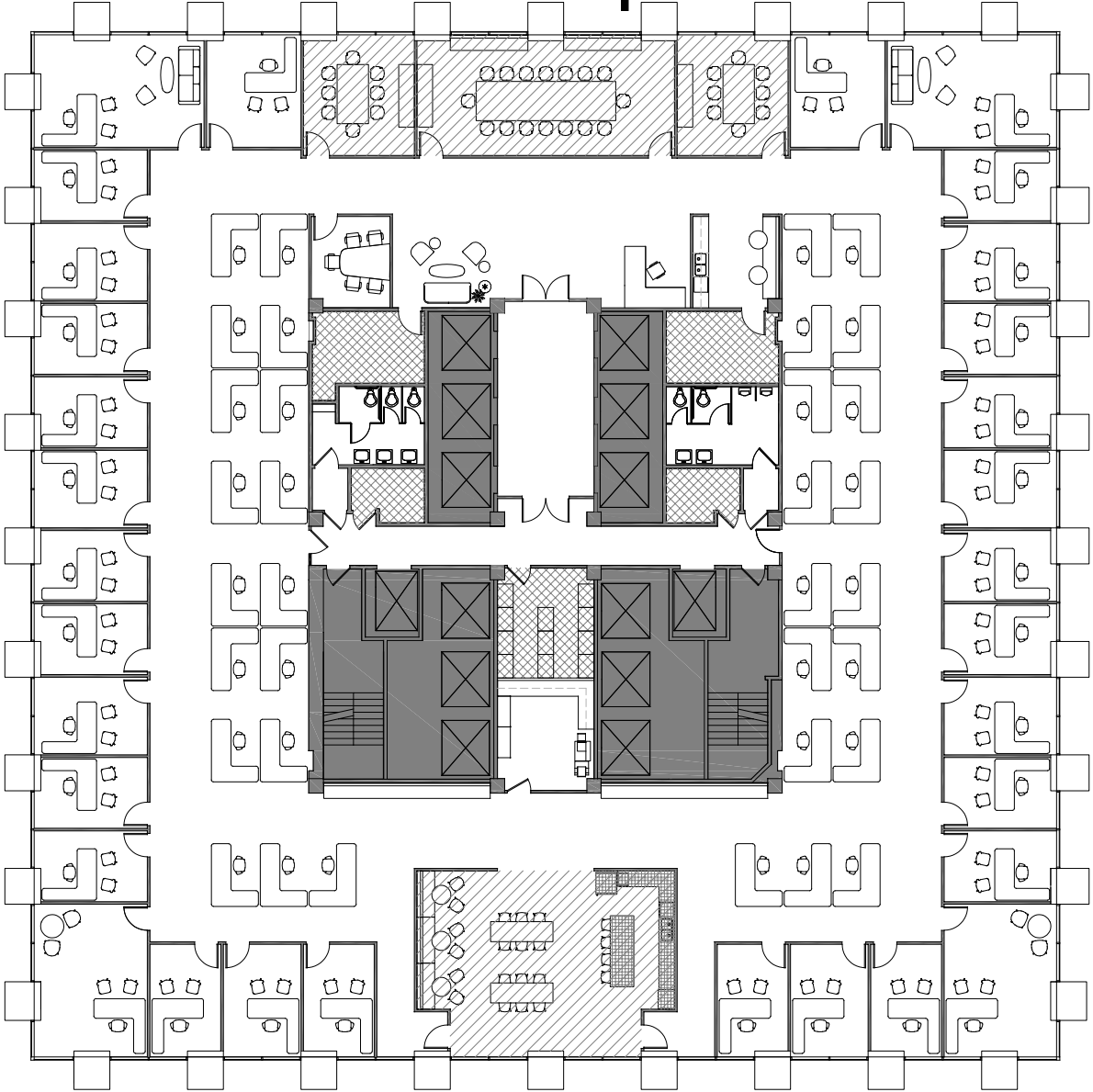
# Example A



| OCCUPANT LOAD       |     |
|---------------------|-----|
| BUSINESS            | 89  |
| ASSEMBLY            | 106 |
| STORAGE             | 2   |
| <hr/>               |     |
| TOTAL OCCUPANT LOAD | 197 |
| TOTAL HEAD COUNT    | 120 |

- KEY
- BUSINESS
  - BUSINESS CONCENTRATED
  - ASSEMBLY
  - STORAGE
  - NO OCCUPANT LOAD

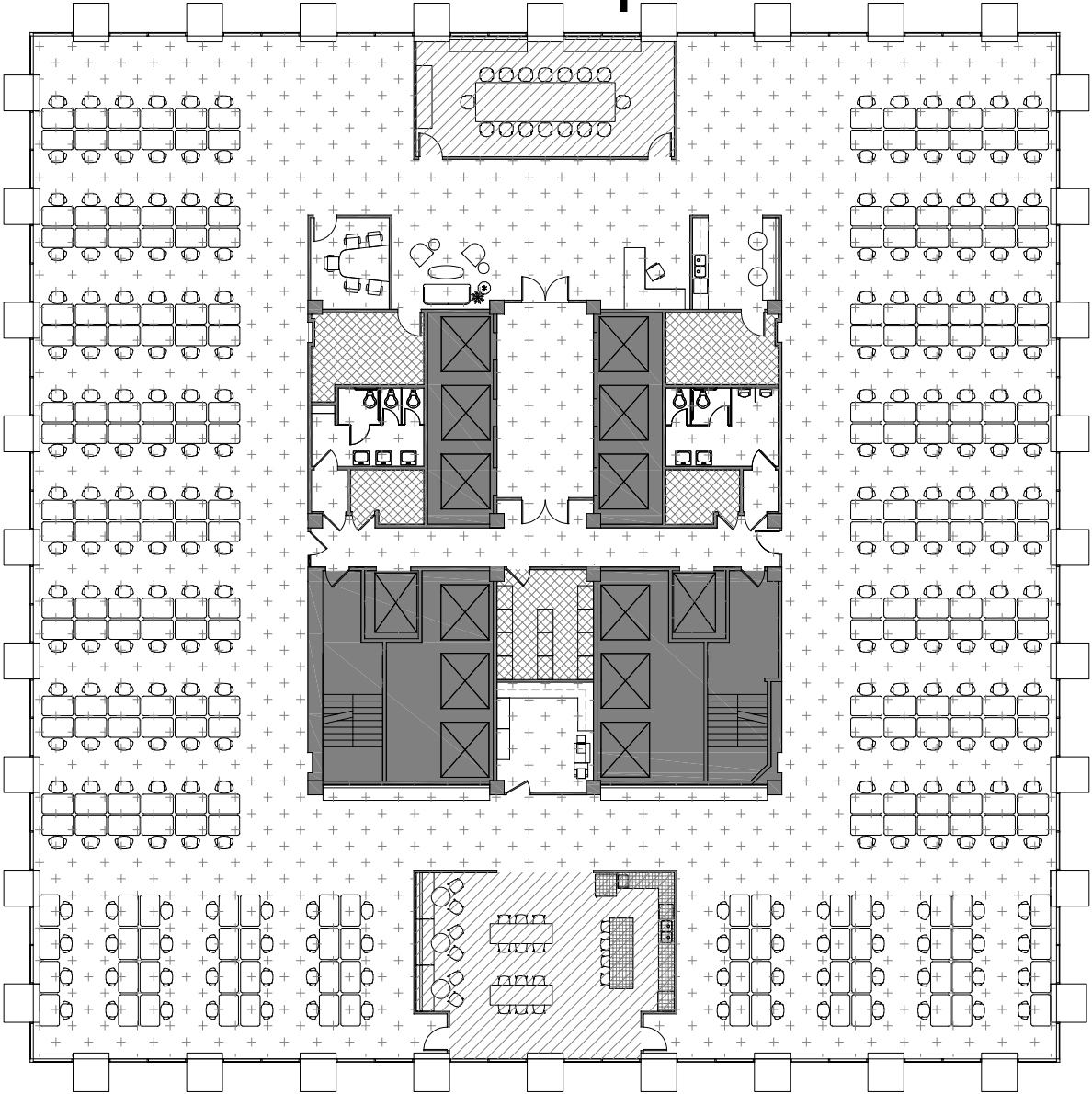
# Example B



| OCCUPANT LOAD       |     |
|---------------------|-----|
| BUSINESS            | 89  |
| ASSEMBLY            | 106 |
| STORAGE             | 2   |
| <hr/>               |     |
| TOTAL OCCUPANT LOAD | 197 |
| TOTAL HEAD COUNT    | 66  |

- KEY
- BUSINESS
  - BUSINESS CONCENTRATED
  - ASSEMBLY
  - STORAGE
  - NO OCCUPANT LOAD

# Example C



| OCCUPANT LOAD         |     |
|-----------------------|-----|
| BUSINESS CONCENTRATED | 275 |
| ASSEMBLY              | 77  |
| STORAGE               | 2   |
| <hr/>                 |     |
| TOTAL OCCUPANT LOAD   | 354 |
| TOTAL HEAD COUNT      | 248 |

KEY

- BUSINESS
- BUSINESS CONCENTRATED
- ASSEMBLY
- STORAGE
- NO OCCUPANT LOAD