



City of Boulder
Fire Department

Community Risk Reduction

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OCCUPANT LOADS

Under the State of Colorado re-opening plan, Safer at Home, certain businesses can re-open but at reduced capacity. Please see all of the required procedures at <https://covid19.colorado.gov/safer-at-home>.

For businesses with a posted occupant load sign, or a certificate of occupancy that stipulates occupant load, that should be used as the basis to determine the reduced capacity. Many businesses do not have a posted occupant load and are not required to have an occupant load posted by our adopted Fire Code. Many of these businesses are now in need of what their occupant load is in order to comply with the re-opening requirements for a reduction in their allowed capacity.

If you have access to the permit or design plan documents for your business, the front page (or within the first few pages) of the documents typically contains occupant load calculations often prepared by a registered architect.

If you do not have access to the permit or design documents, the following may help you determine the occupant load.

In areas without fixed seats, the occupant load is determined based on the use of the space. The area of the space has a square footage (sq.ft.), per person given for specific business based on how the space is used. The area per person is established within the International Building Code (IBC).

The calculations in this document for the restaurant and retail are general examples and are only meant to be used under the current capacity restrictions.

Restaurants:

Areas with tables and chairs: 15 sq.ft./person

Example: Restaurant area of 3,000 sq.ft. (does not include kitchen and other "back of house" functions):

$$3,000/15 = 200 \text{ person occupant load.}$$

State of Colorado Re-Opening: Maximum 50% capacity with a maximum of 50 patrons – In this example, the maximum capacity would be reduced to a 100 persons however, based on the State of Colorado requirements you cannot exceed 50 patrons.

Retail:

This will include almost all businesses that sell product or service to the public. 60 sq.ft./person

Example: Store area of 1,500 sq.ft. (does not include storeroom and other "back of house" functions):

$$1,500/60 = 25 \text{ person occupant load.}$$

Maximum 50% Capacity. In this example, the maximum occupancy would be 13 in addition to the employees.

Building and Fire Codes are used to determine the occupant load (capacity) of buildings and spaces. The determination is used to ensure that there are enough exits, that are properly separated, and of sufficient width so that in an emergency, occupants can safely evacuate. The reduced occupant load required by the States "Safer at Home" reopening reduces the normally allowable occupant load to help maintain proper social distancing.

Additional Help? An online occupant load estimator is available at www.fireinspection360.com/occupantload

You can also contact our Community Risk Reduction Division at firecontractor@bouldercolorado.gov for additional assistance as well.