

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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Occupancy Loading for Residence Halls

Code: 2018 Building Code
Section: Table 1004.1.2

Date: September 12, 2018

Question:

Is 50 square feet per person as is noted in Table 1004.1.2 for dormitories the correct occupancy loading for a residence hall that has individual or 2 person bedrooms grouped into suites of bedrooms of about 4 to 5 bedrooms per suite?

Answer:

No. The 50 square feet (sf) per person listed in Table 1004.1.2 is for “barrack” type floor plans. In a barrack style layout the beds can be closely spaced together and does not account for common use space, individual storage space, or personal space beyond the bedding. If Table 1004.1.2 is used for calculating the occupant load for the configuration described in the question above, 200 sf per person from the “Residential” row is more appropriate because the configuration more closely resembles an apartment configuration.

Other methods of determining the occupant load may be used if they yield a higher load than does Table 1004.1.1 at 200 sf per person. Some of the possible methods are:

- If there appear to be individual bedrooms then 1 occupant per bedroom may be used for the suite if no beds are shown on the plan.
- If beds appear on the plan then 1 occupant per bed may be used for the suite.
- The actual load of the suite as provided by the designer.

Spaces in a dorm other than the R-2 resident suites shall be occupant loaded based on the actual use of the space. For example; A study room in the common area of such a building should be loaded as “Assembly – Unconcentrated” at 15 sf per person just as any conference room would be loaded.

Keywords:

Dorm, student housing, housing