

## **Fire Safety Guidelines Regarding Bunk Layout**

### **Falls Creek Cabins 2008**

Fire safety and building codes are very complex and require the interpretation of someone trained in these engineering disciplines. Understanding this, Falls Creek has enlisted the services of a fire safety engineer/code specialist to help us identify some basic guidelines that will address the majority of the issues related to occupant loads in a cabin. Below are a few of these guidelines to help you eliminate the most common problems related to maximizing occupancy in a building. This list is not intended to address everything and should not be viewed as the final authority regarding issues of occupant loading.

The target of this occupant load discussion is limited to sleeping quarters and bunk layout only. It is not intended to address issues related safety systems, fire protection, or kitchen and meeting space. The occupant load calculations are specific to a given room in which people sleep and are confined by a doorway leading to another room or to the exterior of the building. The first major point of definition is the number of beds in the room. Beds are defined by the number of people who can sleep in the room. Path of egress is defined as the path used to move from lying in a bed to exiting a door.

#### **Rooms with 50 or less beds**

- Must have at least one doorway leading out of the room.
- The door must swing out of the room, not into the room.
- Each bed in the room must have at least one (1) unobstructed path of egress 36" or wider all the way to the door.
- The total path of egress must not exceed 50' in length.
- Dead end isles may not exceed 20'.

#### **Rooms with 51 or more beds**

- Must have at least two (2) doorways leading out of the room.
- The doors must swing out of the room, not into the room.
- The doorways may not be any closer than half of the diagonal measurement of the room. (If a room measures 50' diagonally then a straight line distance of 25' or more is required between the two doorways.)
- Each bed in the room must have at least one (1) unobstructed path of egress 36" or wider all the way to a common path or isle.
- The common path or isle must be 44" or wider all the way to the doorway.
- The total path of egress must not exceed 50' in length.
- Dead end isles may not exceed 20'.

#### **Common Conditions for all Rooms**

- Beds may be side by side as long as there is one side that allows 36" of egress.
- Beds may be end-to-end or end-to-side as long as there is 36" of egress.
- Top bunks must have a ladder. The end of the bunk can be the ladder, but if the end is not accessible because of arrangement then the ladder must be on the side.
- 36" of egress is inclusive of the whole path. This means that if you have 36" between bunk rails, but you have a ladder on the side on the bunk, the ladder further constricts that path width and will not meet code. You will need to make sure that absolutely nothing constricts the path at any point. The best approach would be to allow an extra inch or so just to make sure that it does not drop under 36" for any reason at any location along the path.

**Falls Creek Cabin/Bunk Layout**  
Examples of Acceptable Configurations

