

Code Official Corner

To Approve or Disapprove

By Patrick Parsley, CBO

Public Member of the Board

Reviewing building plans to the new codes causes code officials to reevaluate some of the most basic of life safety requirements of the building code regarding exits. Recently a situation came to light that is rather unique to the way the code is written and interpreted.

Exits have been a part of the model building codes in the U.S. since the inception of the first codes. It has always been viewed that occasions will arise requiring the occupants to leave a building as quickly and efficiently as possible. The intent of the code has been to consider the occupancy, type of construction and occupant loads when determining the level of exit protection and emergency access to be provided in a specific building. Each component of the exit system must be evaluated in light of these aspects.

The code language has become very complicated because it has been found that the exit is only as strong as its weakest link. This is an appropriate analogy as one “links” each area of the building to the safety of the public right of way. The list of components includes:

- a. Floor elevation changes via elevator, stair and ramps.
- b. Doors for swing, size, landings and thresholds.
- c. Door hardware for access, locking, smoke and fire protection.
- d. Distance to the nearest exit.
- e. Controlled access areas such as corridors, hallways and passageways.
- f. Alarms.
- g. Lighting requirements along the exit path.
- h. Smoke control in the exit components.
- i. Signage to indicate exit access.

This is not an exhaustive list, but reveals the complexity of the exit as a system.

As an example, the fundamental issue in question was the simple principle of providing a code complying exit for all areas of a building. The perplexing question dealt with an exterior space which exited through the building. The designer had designed a deck six

feet above grade which exited through a residential type, sliding glass patio door. There was no stair to grade so that security could be maintained.

It seemed clear that this would not be in compliance with the intent of the building code. The door to the deck, being locked from the inside of the building, did not allow for exiting off the deck if locked. Additionally, the sliding door could not accommodate the anticipated occupant load. The intent of the code is to provide a complying exit from all areas of all occupancies, and this locked sliding door did not comply.

Surprisingly, other code officials differ as to whether this situation is actually out of compliance when considering more of a performance approach. For those who might allow this design, or slight variations to it, they cite the use of the deck by a familiar occupancy with limited occupant loads. This would be very similar to allowing this situation within a single dwelling unit. They further state that the deck is an outside space, is sprinkled to some extent, and is only six feet above grade and, therefore, provides alternate protection for occupants on the deck. These safety measures offset the increased occupant load that might occur for this use, thus creating no more of a hazard than for a deck within the dwelling unit as allowed by code. This rationale also avoids compromising the security of the building, as it allows the exterior door to be locked.

The above rationale is not entirely convincing, as it does not consider all the potential uses for the deck, all the possible hazards on the deck, or the type of occupants that may be using the deck. However, the situation may not be as simple as first viewed. The complexities of each building design must be considered for making a reasonable determination of compliance to the applicable safety standards in the code. Each building, at any given time, may have different solutions based on the total design and use.

It is obvious by this exercise that the code cannot specifically address every situation in every building in every municipality. It does, however, address basic principles which must be considered in each design. It is the responsibility of the designer and regulator, in their respective capacities, to see that each project meets the spirit and intent of the code in all aspects of life safety, durability, accessibility and sanitation.