

CHAPTER 21

EMERGENCY RESPONDER SAFETY

This chapter is unique because it not only attempts to bring together the major issues impacting emergency responder safety found throughout prescriptive codes but also provides added importance to this issue by making it a separate section. The prescriptive codes have always made provisions to lessen the dangers to emergency responders, firefighters in particular; however, this code takes the next step and places these concerns into a separate chapter. This does not mean that many of the provisions found elsewhere in this document do not also pertain to firefighter safety but only that specific issues related thereto are addressed in this chapter. Examples of such other provisions can be found in the chapters on egress, access, and hazardous materials.

This chapter was developed with the understanding that emergency response by its nature is inherently dangerous, and it is beyond the realm of possibility to remove all hazards faced by responders. However, much can be done to provide reasonable levels of safety. The scope has been limited to alleviating those hazards that are beyond what would normally be expected during an emergency. Additionally, it is vital that each jurisdiction give careful consideration to what is an acceptable risk for emergency responders and provides appropriate input during the design of the building, facilities, and premises to establish the appropriate level of risk.

Part II of this code also indirectly addresses emergency responder safety in Chapter 6. Section 602.2, Item 2, requires that buildings be designed to allow firefighters to perform the necessary tasks in the event of a fire.

The functional statement 2101.2, as outlined in Items 1 through 3, provides the basic guidance for the user as to what general areas need to be considered when evaluating provisions for emergency responder safety. The user would first establish the required performance level in conjunction with Chapter 3 after a thorough evaluation of the potential hazards to responders. Performance requirements 2101.3.1 through 2101.3.4 list specific criteria that must be addressed after determining the magnitude of design events and while completing the hazard analysis to assure the user has achieved the appropriate level of performance and provided adequate protection for the responders depending on the hazards identified.

Four distinct performance requirements are included in this chapter that specifically address responder safety and functionality. The first two specify that hazards be clearly identified to the responders. This provision can be achieved by signage, barriers, or other common means or might require an extensive data base system available to responders. Such information might come from the designer in the form of facility layout and description of contents. This information would, of course, be based on the severity of the hazard and the specific needs of the responding agency.

The third functional statement addresses similar issues found in Section 602 in Part II of this code but specifically intends to prevent unexpected structural failure. The committee realizes that it is neither economically feasible nor realistic to design and build structures and facilities in such a manner that collapse or failure could be eliminated in every instance regardless of the incident circumstances. Considering this, language is included to indicate that failures should be as predictable as possible considering the incident severity, construction materials and methods, and incident duration. This is more clearly spelled out in Part II, Chapter 6.

The final functional statement assures that emergency responder communication needs are considered. Again, this becomes very specific to the needs of the local jurisdictions as well as the unique needs dictated by the building. This communication could be as simple as standard firefighter phones and public address systems or as extensive as a highly technical specialized radio or microwave system. Additionally, there may be no need for communication systems built into the facility if the emergency responders have adequate communication capabilities to meet the challenges presented by the specific facility.

