STRUCTURAL COLLAPSE OPERATIONS
OBJECTIVES

50-1 Identify the destructive forces that may be placed on structure. (3-3.3a)

50-2 Identify the properties of materials used in building construction. (3-3.3a)

50-3 Identify major fundamentals of structural design. (3-3.3a)

50-4 Identify types of building construction. (3-3.3a)

A. Wood frame (W)
B. Light gauge metal (S3)
C. Unreinforced masonry (URM)
D. Diagonally braced steel frame (S2)
E. Concrete frame (C1 and C3)
F. Concrete Shearwall (C2)
G. Precast concrete frame (PC2)
H. Post-tensioned lift slab
I. Tilt-up concrete wall (TU)

50-5 Identify the different types and characteristics of responses to a structural collapse incident. (3-3.3b)

50-5.1 Initial spontaneous response
50-5.2 Planned community response
50-5.3 Void space rescue
50-5.4 Technician level/FEMA/US&R

50-6 Identify the components of size-up/risk assessment. (3-3.3b)

50-7 Identify the components of a building assessment (3-3.3b&c)

A. Collapse mechanisms
B. Collapse patterns
C. Degree of survivability
D. Victim accessibility
E. Prior intelligence
F. Resources available
G. Structural condition
50-8 Describe the different marking systems used in structural collapse. (3-3.3b&c)

50-8.1 Building identification
50-8.2 Hazard marking
50-8.3 Search assessment marking
50-8.4 Victim marking

50-9 Describe stages of search and rescue planning. (3-3.3)

50-10 Identify hazards associated with structural collapse incidents. (3-3.3a)

50-10.1 Risk assessment components
50-10.2 Safety planning

50-11 Identify five categories of tools and their uses. (3-3.3d)

50-12 Identify various shoring systems and their applications (303.3e)

50-12.1 Identify the function and need of rescue shoring
50-12.2 Identify the building, construction and loads to be supported
50-12.3 Identify the capacities and configuration of rescue shoring
50-12.4 Identify the type of shoring commonly used

A. Cribbing
B. Window/Door shoring
C. T-Spot shoring
D. Vertical shore
E. Laced Post shore
F. Sloped floor shore
G. Raker shore
H. Horizontal shore
I. Mechanical and Pneumatic shore

50-13 Identify the need for victim assessment, care and packaging. (3-3.3d)
50-14  Given a summary of five categories of tools and their uses, the student shall identify and demonstrate their uses with 100% proficiency.

50-15  Given a summary of types of shoring, the student shall identify and demonstrate constructing the following with 100% proficiency.

   A. Cribbing
   B. Window/Door shoring
   C. T-Spot shoring
   D. Vertical shore
   E. Laced Post shore
   F. Sloped floor shore
   G. Raker shore
   H. Horizontal shore
   I. Mechanical and Pneumatic shore

50-16  Given a summary of victim assessment, care and packaging, the student shall demonstrate care and packaging a victim with 100% proficiency.

( ) Indicates reference to NFPA 1670

“BOLD” Indicates a practical objective that is included in the practical section of the instructors guide