SECTION 21 PORTABLE EXTINGUISHERS

Live Fire Prerequisite

21-I.01 Trainee shall identify the classification of types of fires as they relate to the use of portable extinguishers as follows:

NFPA 1001 5.3.16.A

A. Identify the five (5) classes of fire:
   1. Class A
   2. Class B
   3. Class C
   4. Class D
   5. Class K

B. Identify examples of fuels for each class of fire:
   1. Class A
   2. Class B
   3. Class C
   4. Class D
   5. Class K

21-I.02 Trainee, given a group of differing extinguishers, shall identify the appropriate extinguishers for each class of fire as follows:

NFPA 1001 5.3.16.A

A. Class A fire:
   1. pump tank water extinguisher
   2. stored-pressure water
   3. foam
   4. dry chemical (multi-purpose agent)

B. Class B fire:
   1. dry chemical (ordinary base)
   2. dry chemical (multi-purpose)
   3. CO₂ (carbon dioxide)
   4. foam
   5. Halon 1211

C. Class C fire:
   1. dry chemical (ordinary base)
   2. dry chemical (multi-purpose)
   3. CO₂ (carbon dioxide)
   4. Halon 1211

D. Class D fire:
   1. powder extinguishing agents for metal fires.

E. Class K
   1. wet chemical systems
21-I.03 Trainee shall identify the portable fire extinguisher rating system (Underwriters Laboratories, Inc.):

**NFPA 1001 5.3.16.A**

A. the basic symbols for the classes of fires  
B. the picture-symbol labeling system for the selection of fire extinguishers  
C. the numerical rating system for Class A & B fire extinguishers  
D. the test procedure for rating Class C portable extinguishers  
E. the test procedure for rating Class D portable extinguishers  
F. portable extinguishers suitable for more than one class of fire  
G. the test procedure for rating Class K portable extinguishers

21-I.04 Trainee shall demonstrate the use of portable extinguishers for each class of fire as follows:

**NFPA 1001 5.3.16.B**  
(FD can document with Portable Fire Extinguishers #1 skill sheet found in appendix and retain on file)

A. extinguish a class A fire using a pump tank water extinguisher  
B. extinguish a class B fire using a dry chemical extinguisher  
C. extinguish a class B fire using a CO₂ extinguisher

21-I.05 Trainee shall identify and explain the extinguishing effect needed for each class of fire as follows:

**NFPA 1001 5.3.16.B**

A. Class A fire:  
   1. cooling  
   2. smothering  
B. Class B fire:  
   1. smothering  
   2. blanketing  
C. Class C fire:  
   1. smothering & non-conductive  
D. Class D fire:  
   1. must be non-reactive with burning material  
E. Class K fire:  
   1. oxygen depletion & vapor suppression

21-I.06 Trainee shall identify and explain fire extinguisher characteristics and operations of:

**NFPA 1001 5.3.16**

A. Pump tank water extinguishers, stored-pressure water extinguishers, aqueous film forming foam extinguishers, Halon 1211 extinguishers, CO₂ extinguishers, dry chemical extinguishers (ordinary base agent), and dry chemical extinguishers (multi-purpose base) as to their:  
   1. size  
   2. applicable to what class of fires  
   3. stream reach under normal conditions  
   4. discharge time under normal conditions  
   5. protection from freezing  
   6. methods of operation

*Firefighter I - There are no objectives required for this certification level.*  
*Firefighter II - There are no objectives required for this certification level.*