

SECTION 7 VENTILATION PRACTICES

Live Fire Training Prerequisite

- 7-I.01 Trainee shall define the principles of ventilation, and identify the advantages and effects of proper ventilation.
NFPA 1001 4.3.11
- 7-I.02 Trainee shall identify the dangers present, and the precautions to be taken in performing ventilation.
A. Trainee shall describe the considerations involving basic size-up.
NFPA 1001 4.3.11, 4.3.12.A-B
1. Life safety hazards
2. Determining the location and extent of the fire
3. Identifying building construction features
B. Trainee shall describe the considerations affecting the decision to ventilate.
NFPA 1001 4.3.11
1. Assessing the need for ventilation
2. Deciding where ventilation is needed
3. Deciding how ventilation should be accomplished
- 7-I.03 Trainee shall demonstrate opening various types of windows from inside and outside, with and without fire department tools.
NFPA 1001 4.3.11
- 7-I.04 Trainee shall demonstrate breaking window or door glass, and removing obstructions.
NFPA 1001 4.3.11
- 7-I.05 Trainee shall describe and safely demonstrate, using both hand and power tools, the ventilation of a roof and a floor.
NFPA 1001 4.3.12
- 7-I.06 Trainee shall identify and describe the signs, causes, and effects of a back draft explosion.
NFPA 1001 4.3.11
- 7-I.07 Trainee shall demonstrate ventilation using a water fog.
NFPA 1001 4.3.11
- 7-I.08 Trainee shall identify characteristics of a flashover.
NFPA 1001 4.3.11
- 7-I.09 Trainee shall identify the characteristics of and describe the necessary precautions when ventilating the following roof types.
NFPA 1001 4.3.12
A. Pitched
1. Hip
2. Lantern
3. Shed
4. Mansard
5. Gambrel
6. Butterfly
B. Flat
C. Arched

- 7-I.10 Trainee shall identify the size and location of an opening for ventilation, and the precautions to be taken during ventilation.
NFPA 1001 4.3.11, 4.3.12
- A. Existing roof openings
 - B. Location of the fire
 - C. Direction in which the fire will be drawn
 - D. Type of building construction
 - E. Wind direction
 - F. Progress of the fire
 - G. Condition of the building
 - H. Safety precautions
 - I. Relative efficiency of large vs. small openings
- 7-I.11 Trainee shall identify and demonstrate natural and mechanical methods for horizontal ventilation of a structure.
NFPA 1001 4.3.11, 4.3.12
- A. Trainee shall identify horizontal ventilation tools and equipment.
 - B. Trainee shall describe structural characteristics of buildings which aid in natural or mechanical ventilation.
 - 1. Scuttle hatches
 - 2. Bulkheads
 - 3. Skylights
 - 4. Monitors
 - 5. Light and ventilation shafts
 - C. Trainee shall identify and describe obstructions to horizontal ventilation.
NFPA 1001 4.3.11
 - D. Trainee shall describe weather conditions which affect horizontal ventilation.
NFPA 1001 4.3.11
- 7-I.12 Trainee shall demonstrate the removal of skylights, scuttle covers, and other covers on rooftops.
NFPA 1001 4.3.11
- 7-I.13 Trainee shall demonstrate the types of equipment used for forced mechanical ventilation.
NFPA 1001 4.3.11
- A. Trainee shall identify fire ground situations where forced ventilation procedures may be required.
 - 1. Positive pressure method
 - 2. Negative pressure method
 - B. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect positive pressure ventilation.
 - C. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect negative ventilation.
- 7-I.14 Trainee shall identify the location of the opening, the method to be used, and the precautions to be taken when ventilating a basement.
NFPA 1001 4.3.11

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

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