

NFPA 1081: 2024 Edition, Chapter 6 Advanced Exterior Facility Fire Brigade Member

Below please find what has been previously approved by the Committee on Accreditation (COA) for this level of certification. This example does not take into consideration “Document Review”, “Portfolio”, or “Other testing methods.”

If your agency selects completing their online Assessment Methodology Matrix (AMM) utilizing these test methods, our Technical Analysts may place your application under a COA meeting consent agenda bypassing the usual COA review.

The spaces identified below with an “X” must be replaced with the appropriate cognitive test item numbers (e.g. Questions 1,4,6,7,9, etc.) or the score sheet numbers under Product, Psychomotor/Process methods as score sheet numbers (e.g.- SS 101, 202, and 304, etc.).

	Knowledge-Based Assessments (graded after submission)		Performance-Based Assessments (graded in real-time as they are performed)	
Section	Cognitive (e.g. Multiple Choice, Short Answer, Discretionary Time with Resources)	Product (e.g., document or develop a budget, proposal, lesson plan)	Psychomotor (Primarily an observable physical task. e.g., don, doff)	Process (Primarily a mental or verbalized task. e.g., inspect)
For qualification or certification at the advanced exterior facility fire brigade member level, the member shall meet the requirements in 5.2 , 6.1 , 6.2 , 5.3 , 6.3 and the requirements defined in Chapter 7 of NFPA 470.				
(FOR THIS LINE ONLY- PLEASE INPUT "ACKNOWLEDGE" IN THE "OTHER" COLUMN OF THE MATRIX.)				
6.1				
6.1.2.1*	Utilize a pre-incident plan, given pre-incident plans and an assignment, so that the facility fire brigade member implements the responses detailed by the plan.			
6.1.2.1				X
(A) Requisite Knowledge.				

The sources of water supply for fire protection or other fire-extinguishing agents, site-specific hazards, the fundamentals of fire suppression and detection systems including specialized agents, and common symbols used in diagramming construction features, utilities, hazards, and fire protection systems.

[6.1.2.1 \(A\)](#) **X**

(B) Requisite Skills.

The ability to identify the components of the pre-incident plan such as fire suppression and detection systems, structural features, site-specific hazards, and response considerations.

[6.1.2.1 \(B\)](#) **X**

[6.1.2.2*](#)

Interface with outside mutual aid organizations, given SOPs for mutual aid response and communication protocols, so that a unified command is established and maintained.

[6.1.2.2](#) **X**

(A) Requisite Knowledge.

Mutual aid procedures and the structure of the mutual aid organization, site SOPs, and incident management systems (IMS).

[6.1.2.2 \(A\)](#) **X**

(B) Requisite Skills.

The ability to communicate with mutual aid organizations and to integrate operational personnel into teams under a unified command.

[6.1.2.2 \(B\)](#) **X**

6.2.1

Use thermal protective clothing during exterior firefighting operations, given thermal protective clothing, so that the clothing is correctly donned within 2 minutes (120 seconds), worn, and doffed.

[6.2.1](#) **X**

(A) Requisite Knowledge.

Conditions that require personal protection, uses and limitations of thermal protective clothing, components of thermal protective clothing ensemble, and donning and doffing procedures.

[6.2.1 \(A\)](#) **X**

(B) Requisite Skills.

The ability to correctly don and doff thermal protective clothing and to perform assignments while wearing thermal protective clothing.

[6.2.1 \(B\)](#)

X

[6.2.2*](#)

Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other personal protective equipment (PPE), so that the SCBA is correctly donned, the SCBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.

[6.2.2](#)

X

(A) Requisite Knowledge.

Conditions that require respiratory protection, uses and limitations of SCBA, components of SCBA, donning procedures, breathing techniques, indications for and emergency procedures used with SCBA, and physical requirements of the SCBA wearer.

[6.2.2 \(A\)](#)

X

(B) Requisite Skills.

The ability to control breathing, replace SCBA air cylinders, use SCBA to exit through restricted passages, initiate and complete emergency procedures in the event of SCBA failure or air depletion, and complete donning procedures.

[6.2.2 \(B\)](#)

X

[6.2.3*](#)

Attack an exterior fire operating as a member of a team, given a water source, a handline, PPE, tools, and an assignment, so that team integrity is maintained, the attack line is correctly deployed for advancement, access is gained into the fire area, appropriate application practices are used, the fire is approached in a safe manner, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are avoided or managed, and the fire is brought under control.

[6.2.3](#)

X

(A) Requisite Knowledge.

Principles of fire streams; types, design, operation, nozzle pressure effects, and flow capabilities of nozzles; precautions to be followed when advancing handlines to a fire; observable results that a fire

stream has been correctly applied; dangerous conditions created by fire; principles of exposure protection; potential long-term consequences of exposure to products of combustion; physical states of matter in which fuels are found; the application of each size and type of attack line; the role of the backup team in fire attack situations; attack and control techniques; and exposing hidden fires.

[6.2.3 \(A\)](#)

X

(B) Requisite Skills.

The ability to prevent water hammers when shutting down nozzles; open, close, and adjust nozzle flow and patterns; apply water using direct, indirect, and combination attacks; advance charged and uncharged 38 mm (1 1/2 in.) diameter or larger handlines; extend handlines; replace burst hose sections; operate charged handlines of 38 mm (1 1/2 in.) diameter or larger; couple and uncouple various handline connections; carry hose; attack fires; and locate and suppress hidden fires.

[6.2.3 \(B\)](#)

X

6.2.4

Conduct search and rescue operations as a member of a team, given an assignment, obscured vision conditions, PPE, scene lighting, forcible entry tools, handlines, and ladders when necessary, so that all equipment is correctly used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety, including respiratory protection, is not compromised.

[6.2.4](#)

X

(A) Requisite Knowledge.

Use of appropriate tools and equipment, psychological effects of operating in obscured conditions and ways to manage them, methods to determine if an area is tenable, primary and secondary search techniques, team members' roles and goals, methods to use and indicators of finding victims, victim removal methods, and considerations related to respiratory protection.

[6.2.4 \(A\)](#)

X

(B) Requisite Skills.

The ability to use SCBA to exit through restricted passages, use tools and equipment for various types of rescue operations, rescue a facility fire brigade member with functioning respiratory protection, rescue a facility fire brigade member whose respiratory protection is not functioning, rescue a person who has no respiratory protection, and assess areas to determine tenability.

[6.2.4 \(B\)](#)

X

[6.2.5*](#)

Conserve property operating as a member of a team, given special tools and equipment and an assignment within the facility, so that exposed property and the environment are protected from further damage.

[6.2.5](#)

X

(A) Requisite Knowledge.

The purpose of property conservation and its value to the organization, methods used to protect property, methods to reduce damage to property, operations at properties protected with automatic sprinklers or special protection systems, understanding the impact of using master streams and multiple hose streams on property conservation, particularly as it can relate to the impact on outside facilities.

[6.2.5 \(A\)](#)

X

(B) Requisite Skills.

The ability to deploy covering materials, control extinguishing agents, and cover openings and equipment such as doors, windows, floor openings, and roof openings related to the impact of outside facilities.

[6.2.5 \(B\)](#)

X

6.2.6

Overhaul a fire scene, given PPE, a handline, hand tools, scene lighting, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

[6.2.6](#)

X

(A) Requisite Knowledge.

Types of fire handlines and water application devices most effective for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, obvious signs of area of origin or signs of arson, and reasons for protection of a fire scene.

[6.2.6 \(A\)](#)

X

(B) Requisite Skills.

The ability to deploy and operate a handline, expose void spaces without compromising structural integrity, apply water for maximum effectiveness, expose and extinguish hidden fires, recognize and preserve obvious signs of area of origin and fire cause, and evaluate for complete extinguishment.

6.2.6 (B)			X
6.2.7 Establish a water supply for firefighting operations, given a water source and tools, so that a water supply is established and maintained. (See A.5.3.4.)			
6.2.7			X
(A) Requisite Knowledge. Water sources, correct operation of site water supply components, hydraulic principles, and the effect of mechanical damage and temperatures on the operability of the water supply source.			
6.2.7 (A)	X		
(B) Requisite Skills. The ability to operate the site water supply components and identify damage or impairment.			
6.2.7 (B)			X
6.2.8* Exit a hazardous area as a team, given vision-obscured conditions, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.			
6.2.8			X
(A) Requisite Knowledge. Personnel accountability systems, communication procedures, emergency evacuation methods, what constitutes a safe haven, elements that create or indicate a hazard, and emergency procedures for loss of air supply.			
6.2.8 (A)	X		
(B) Requisite Skills. The ability to operate as a team member in vision-obscured conditions, locate and follow a guideline, conserve air supply, evaluate areas for hazards, and identify a safe haven.			
6.2.8 (B)			X
6.2.9* Operate as a member of a rapid intervention crew, given size-up information, basic rapid intervention tools and equipment, and an assignment, so that strategies to effectively rescue the facility brigade member(s) are identified and implemented; hazard warning systems are established and understood by			

all participating personnel; incident-specific PPE is identified, provided, and utilized; physical hazards are identified; and confinement, containment, and avoidance measures are discussed.

[6.2.9](#)

X

(A) Requisite Knowledge.

Identification and care of PPE; specific hazards associated with the facility; strategic planning for rescue incidents; communications and safety protocols; atmospheric monitoring equipment needs; identification, characteristics, expected behavior, type, causes, and associated effects of personnel becoming incapacitated or trapped; and recognition of, potential for, and signs of impending building collapse.

[6.2.9 \(A\)](#)

X

(B) Requisite Skills.

The ability to use PPE, determine resource needs, select and operate basic and specialized tools and equipment, implement communications and safety protocols, and mitigate specific hazards associated with rescue of trapped or incapacitated personnel.

[6.2.9 \(B\)](#)

X

6.2.10

Perform field reduction of contaminants following an incident, given an assignment to establish and operate a field reduction of contaminants site, knowledge of the level of contaminants, and approved tools, equipment, and PPE, so that the field reduction of contaminants site is established and maintained; approved PPE is selected and used in the proper manner; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; assignments are completed; field reduction of contaminants is performed, and the tools, equipment, and PPE are prepared for reuse.

[6.2.10](#)

X

(A) Requisite Knowledge.

Necessary safety precautions when working at incidents; the purpose, advantages, and limitations of field reduction of contaminants; the need for field reduction of contaminants based on the tasks performed and the contamination in place; the sources and hazards of carcinogens at incident scenes; the process for performing field reduction of contaminants; and the process for cleaning, disinfecting, and inspecting tools, equipment, and PPE.

[6.2.10 \(A\)](#)

X

(B) Requisite Skills.

The ability to establish and maintain scene control; inspect, don, work in, go through decontamination while wearing, and doff approved PPE; set up a field reduction of contaminants site in a safe area; isolate contaminated tools, equipment, and PPE; conduct field reduction of contaminants; and clean, disinfect, and inspect approved tools, equipment, and PPE and prepare them for reuse.

[6.2.10 \(B\)](#)

X

6.3.1

Perform a fire safety survey in a facility, given an assignment, survey forms, and procedures, so that fire and life safety hazards are identified, recommendations for their correction are made, and unresolved issues are referred to the proper authority.

[6.3.1](#)

X

X

(A) Requisite Knowledge.

Organizational policy and procedures, common causes of fire and their prevention, and the importance of fire safety and referral procedures.

[6.3.1 \(A\)](#)

X

(B) Requisite Skills.

The ability to complete forms, recognize hazards, match findings to pre-approved recommendations, and effectively communicate findings to the proper authority.

[6.3.1 \(B\)](#)

X

X

[6.3.2*](#)

Gain access to facility locations, given keys, forcible entry tools (e.g., bolt cutters, small hand tools, and ladders), and an assignment, so that areas are accessed and remain accessible during advanced exterior facility fire brigade operations.

[6.3.2](#)

X

(A) Requisite Knowledge.

Site drawing reading, access procedures, forcible entry tools and procedures, and site-specific hazards, such as access to areas restricted by railcar movement, fences, and walls. Procedures associated with special hazard areas such as electrical substations, radiation hazard areas, and other areas specific to the site, if needed.

[6.3.2 \(A\)](#)

X

(B) Requisite Skills.

The ability to read site drawings, identify areas of low overhead clearance, identify areas on roadways having load restrictions, identify access routes to water supplies, identify hazardous materials locations, identify electrical equipment locations (overhead and belowgrade equipment), ability to open gates by manual and/or automatic means, ability to forcibly gain access to areas, and the ability to identify site hazards.

[6.3.2 \(B\)](#)

X

6.3.3

Utilize master stream appliances, given an assignment, an extinguishing agent, and a master stream device and supply hose, so that the appliance is set up correctly and the agent is applied as assigned.

[6.3.3](#)

X

(A) Requisite Knowledge.

Correct operation of master stream appliances, uses for master stream appliances, tactics using master stream appliances, selection of the master stream appliance for different fire situations, the effect of master stream appliances on search and rescue, ventilation procedures, and property conservation.

[6.3.3 \(A\)](#)

X

(B) Requisite Skills.

The ability to correctly put in service a master stream appliance and evaluate and forecast a fire's growth and development.

[6.3.3 \(B\)](#)

X

[6.3.4*](#)

Extinguish an ignitable (or simulated ignitable) liquid fire operating as a member of a team, given an assignment, a handline, PPE, a foam proportioning device, a nozzle, foam concentrates, and a water supply, so that the correct type of foam concentrate is selected for the given fuel and conditions, a correctly proportioned foam stream is applied to the surface of the fuel to create and maintain a foam blanket, the fire is extinguished, re-ignition is prevented, and team protection is maintained.

[6.3.4](#)

X

(A) Requisite Knowledge.

Methods by which foam prevents or controls a hazard; principles by which foam is generated; causes for poor foam generation and corrective measures; difference between hydrocarbon and polar solvent fuels and the concentrates that work on each; the characteristics, uses, and limitations of firefighting foams; the advantages and disadvantages of using fog nozzles versus foam nozzles for

foam application; foam stream application techniques; hazards associated with foam usage; and methods to reduce or avoid hazards.

[6.3.4 \(A\)](#)

X

(B) Requisite Skills.

The ability to prepare a foam concentrate supply for use, assemble foam stream components, master various foam application techniques, and approach and retreat from fires and spills as part of a coordinated team.

[6.3.4 \(B\)](#)

X

[6.3.5*](#)

Control a flammable gas fire operating as a member of a team, given an assignment, a handline, PPE, and tools, so that crew integrity is maintained, contents are identified, the flammable gas source is controlled or isolated, hazardous conditions are recognized and acted upon, and team safety is maintained.

[6.3.5](#)

X

(A) Requisite Knowledge.

Characteristics of flammable gases, components of flammable gas systems, effects of heat and pressure on closed containers, boiling liquid expanding vapor explosion (BLEVE) signs and effects, methods for identifying contents, water stream usage and demands for pressurized gas fires, what to do if the fire is prematurely extinguished, alternative actions related to various hazards, and when to retreat.

[6.3.5 \(A\)](#)

X

(B) Requisite Skills.

The ability to execute effective advances and retreats, apply various techniques for water application, assess gas storage container integrity and changing conditions, operate control valves, and choose effective procedures when conditions change.

[6.3.5 \(B\)](#)

X

[6.3.6*](#)

Extinguish an exterior fire using special extinguishing agents other than foam operating as a member of a team, given an assignment, a handline, PPE, and an extinguishing agent supply, so that fire is extinguished, re-ignition is prevented, and team protection is maintained.

[6.3.6](#)

X

(A) Requisite Knowledge.

Methods by which special agents, such as dry chemical, dry powder, and carbon dioxide, prevent or control a hazard; principles by which special agents are generated; the characteristics, uses, and limitations of firefighting special agents; the advantages and disadvantages of using special agents; special agents application techniques; hazards associated with special agents usage; and methods to reduce or avoid hazards.

[6.3.6 \(A\)](#)

X

(B) Requisite Skills.

The ability to operate a special agent supply for use, master various special agents application techniques, and approach and retreat from hazardous areas as part of a coordinated team.

[6.3.6 \(B\)](#)

X

[6.3.7*](#)

Interpret alarm conditions, given an alarm signaling system, a procedure, and an assignment, so that the alarm condition is correctly interpreted and a response is initiated.

[6.3.7](#)

X

(A) Requisite Knowledge.

The different alarm detection systems within the facility; difference between alarm, trouble, and supervisory alarms; hazards protected by the detection systems; hazards associated with each type of alarm condition; knowledge of the emergency response plan; and communication procedures.

[6.3.7 \(A\)](#)

X

(B) Requisite Skills.

The ability to understand the different types of alarms, to implement the response, and to provide information through communications.

[6.3.7 \(B\)](#)

X

[6.3.8*](#)

Activate a fixed fire suppression system, given PPE, a fixed fire protection system, a procedure, and an assignment, so that the correct steps are followed and the system operates.

[6.3.8](#)

X

(A) Requisite Knowledge.

Different types of extinguishing agents, hazards associated with system operation, how the system operates, sequence of operation, system overrides and manual intervention procedures, and shutdown procedures to prevent damage to the operated system or to those systems associated with the operated system.

[6.3.8 \(A\)](#)

X

(B) Requisite Skills.

The ability to operate fixed fire suppression systems via electrical or mechanical means and shutdown procedures for fixed fire suppression systems.

[6.3.8 \(B\)](#)

X

[6.3.9*](#)

Extinguish a Class C (electrical) or simulated Class C fire as a member of a team, given an assignment, a Class C fire-extinguishing appliance/extinguisher, and PPE, so that the proper type of Class C agent is selected for the condition, the selected agent is correctly applied to the fuel, the fire is extinguished, re-ignition is prevented, team protection is maintained, and the hazard is faced until retreat to safe haven is reached.

[6.3.9](#)

X

(A) Requisite Knowledge.

Methods by which a Class C agent prevents or controls a hazard; methods by which Class C fires are de-energized; causes of injuries from Class C firefighting on live Class C fires with Class A agents and the Class C agents; the extinguishing agents' characteristics, uses, and limitations; the advantages and disadvantages of de-energizing as using water fog nozzles on a Class A or Class B fire; and methods to reduce or avoid hazards.

[6.3.9 \(A\)](#)

X

(B) Requisite Skills.

The ability to operate Class C fire extinguishers or fixed systems and approach and retreat from Class C fires as part of a coordinated team.

[6.3.9 \(B\)](#)

X

[6.3.10*](#)

Utilize tools and equipment assigned to the facility fire brigade, given an assignment and specific tools, so that tools are selected and correctly used under adverse conditions in accordance with manufacturer's recommendations and the policies and procedures of the facility fire brigade.

6.3.10			X
(A) Requisite Knowledge.			
Available tools and equipment, their storage locations, and their correct use in accordance with recognized practices, and selection of tools and equipment given different conditions.			
6.3.10 (A)	X		
(B) Requisite Skills.			
The ability to select and use the correct tools and equipment for various tasks, follow guidelines, and restore tools and equipment to service after use.			
6.3.10 (B)			X
6.3.11			
Set up and use portable ladders, given an assignment, single and extension ladders, and team members as appropriate, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the correct height with the fly locked, the top is placed against a reliable structural component, and the assignment is accomplished.			
6.3.11			X
(A) Requisite Knowledge.			
Parts of a ladder, hazards associated with setting up ladders, what constitutes a stable foundation for ladder placement, different angles for various tasks, safety limits to the degree of angulation, and what constitutes a reliable structural component for top placement.			
6.3.11 (A)	X		
(B) Requisite Skills.			
The ability to carry ladders, raise ladders, extend ladders and lock flies, determine that a wall and roof will support the ladder, judge extension ladder height requirements, and place the ladder to avoid obvious hazards.			
6.3.11 (B)			X
6.3.12*			
Respond on apparatus to an emergency scene, given personal protective clothing and other necessary PPE, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other PPE is correctly used. [1001:4.3.2]			
6.3.12			X

(A) Requisite Knowledge.

Mounting and dismounting procedures for riding fire apparatus, hazards and ways to avoid hazards associated with riding apparatus, prohibited practices, and types of department PPE and the means for usage. [1001:4.3.2(A)]

[6.3.12 \(A\)](#)

X

(B) Requisite Skills.

The ability to use each piece of provided safety equipment. [1001:4.3.2(B)]

[6.3.12 \(B\)](#)

X

6.3.13

Attack a vehicle fire operating as a member of a team, given PPE, an attack line, and hand tools, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are overhauled, and the fire is extinguished.

[6.3.13](#)

X

(A) Requisite Knowledge.

Principles of fire streams as they relate to fighting fires; precautions to be followed when advancing hose lines; observable results that a fire stream has been properly applied; identifying alternative fuels and the hazards associated with them; dangerous conditions created during a fire; common types of accidents or injuries related to fighting fires and how to avoid them; how to access locked passenger, trunk, and engine compartments; and methods for overhauling.

[6.3.13 \(A\)](#)

X

(B) Requisite Skills.

The ability to identify fuel type; assess and control fuel leaks; open, close, and adjust the flow and pattern on nozzles; apply water for maximum effectiveness while maintaining flash fire protection; advance 38 mm (1 1/2 in.) or larger diameter attack lines; and expose hidden fires by opening all compartments.

[6.3.13 \(B\)](#)

X