Checked against TCFP and SFFMA sources. Published Oct 11, 2026.

Fire Hose Practices

Share of the exam	Tables	Tested facts
7 to 13%	**2**	**2**

Hose sizes and test pressures	
Item	**Value**
Large-diameter hose (LDH)	3.5 in. (88 mm) or greater, standard sizes 4 in. and 5 in., primarily supply hose
Booster hose flow	Only 40 to 50 gpm, so small outdoor and trash or dumpster fires only, never structural or vehicle firefighting
Attack hose annual test	Minimum 300 psi (2068 kPa), with service use up to 275 psi
Supply hose test	200 psi minimum
Visual hose inspection	At least quarterly, plus a visual check after every use
Threaded couplings	Used on hose up to 3 in. in diameter, sealed by a rubber swivel gasket

Hose loads	
Load	**Key point**
Flat load	Hose lies flat; the load that can be used with any hose size, including LDH
Horseshoe load	Stands each length on its edge around the bed perimeter; LDH tends to fall over, so not for LDH
Accordion load	On edge, so more hose wear and not recommended for LDH, but easy to carry off in folds
Triple-layer load	Hose folded back on itself to about one third of its length before loading; one person can deploy it, suiting minimal staffing, though it is harder to load
Minuteman load	Lets one fire fighter flake out one fold at a time from the shoulder, controlling deployment and avoiding sharp kinks

TESTED

- ☑ Hose service testing is at 150 psi, 1034 kPa.
- ☑ On a standpipe, connect the attack line one floor below the fire floor so the hose can be flaked out and charged safely before advancing. Feed a sprinkler FDC at 150 psi as the general guideline.

Firefighter PPE & SCBA

Share of the exam	Tables	Tested facts
5 to 11%	**2**	**1**

PPE and SCBA numbers	
Item	**Value**
Oxygen-deficient atmosphere	19.5 per cent or less
Respiratory protection regulation	29 CFR 1910.134
Rated 30-minute cylinder under work	About 15 minutes, roughly half the rated duration
Named weight figure	At least 25 lb (11 kg)

SCBA numbers	
Item	**Value**
Low-air alarm (EOSTI) activation	35 per cent of cylinder capacity
45-minute cylinder under exertion	About 20 to 25 minutes of real working time
Skip breathing cycle	About 5 seconds per cycle
RIC pack LEDs	Two steady green means full; one steady green means about half full

TESTED

- [x] More fire deaths are caused by smoke inhalation than by burns. That is the reason all of this equipment exists.

Fire Streams

Share of the exam	Tables	Tested facts
5 to 11%	**2**	**0**

Stream numbers

Item	Value
Pressure per foot of elevation	0.434 psi
Master stream flow	350 to 1500 gpm (1325 to 5678 L/min)
Large handline	2.5 inches (65 mm) or more, flowing more than 250 gpm

Special nozzles

Nozzle	What it does
Adjustable-gallonage fog	The operator picks a discrete flow setting, held as long as rated pressure is supplied; a fixed-gallonage nozzle has one preset flow and an automatic nozzle varies its opening with a spring-loaded piston
Water curtain	A flat screen of water; radiant heat passes through its air gaps, so direct it onto the exposed building's surface to wet and cool it
Cellar or Bresnan distributor	Lowered through an opening into a cellar or cockloft, spraying a wide circular pattern like a large sprinkler head
Piercing nozzle	Driven or hammered through sheet metal or a wall to discharge water into a void that cannot otherwise be reached

Fire Behavior (Fire Science)

Share of the exam	Tables	Tested facts
4 to 10%	**0**	**1**

TESTED

- [x] Flashover occurs around 1000 degrees Fahrenheit, 540 degrees Celsius, and wind as low as 10 mph can drive a wind-driven fire.

Salvage & Overhaul

Share of the exam	Tables	Tested facts
4 to 10%	**1**	**0**

PEARL
Only the incident commander may order sprinklers shut down, because shutting them too early can allow the fire to regain headway.

Pike pole sizes

Tool	Reach
Standard pike pole, 4 to 6 ft	Lets a fire fighter on the floor pull down a 10 ft (3 m) high ceiling
Closet hook	2 to 4 ft (0.6 to 1 m), a short pike pole for tight spaces such as closets
Longer variants	8 to 10 ft and 12 to 14 ft poles serve higher ceilings

Firefighter Safety & Health

Share of the exam	Tables	Tested facts
3 to 9%	**1**	**2**

Rehabilitation numbers	
Item	**Value**
Cold weather rehab trigger	Wind chill of 10 degrees Fahrenheit or lower (USFA)
Self-rehab after one 30-minute cylinder	Minimum 10 minutes with fluid replacement, also after 20 minutes of intense work without SCBA
After two cylinders or an encapsulating suit	Minimum 20 minutes
First dehydration sign	Increased thirst, at roughly 1 per cent body-weight fluid loss
Invisible combustion particulates	Approximately 97 per cent

TESTED

- ☑ Carbon monoxide binds to haemoglobin roughly 200 times more readily than oxygen does, which is why exposure is so dangerous at low concentrations.
- ☑ Team integrity: go in together, stay together, and come out together. Two fire fighters must remain outside the hazardous area, properly equipped to respond immediately, which is the two-in/two-out rule that the rapid intervention crew concept extends.

Fire Service Ladder Practices

Share of the exam	Tables	Tested facts
3 to 9%	**1**	**1**

Ladder complements and lengths	
Item	**Requirement**
Truck company	115 ft (35 m) of ground ladders total, including at least two straight ladders with roof hooks, two extension ladders and one folding ladder
Quint	An 85 ft minimum complement
Initial (quick) attack apparatus	One combination or extension-type ladder at least 12 ft (4 m) long
Ground ladder maximum	50 ft (15 m); taller buildings need aerial apparatus
Bangor ladder	Staypoles are required at 40 ft (12 m) or longer
Fresno ladder	Narrow two-section attic extension ladder, 10 to 14 ft, no halyard, extended manually

TESTED

- [x] Fire department ground ladders are designed to support 750 lb (340 kg) under NFPA 1932, one victim plus two fully equipped fire fighters. Construction and home-use ladders are rated for only 225 to 300 lb, which is why they are never substitutes.

Ventilation Practices

Share of the exam	Tables	Tested facts
3 to 9%	**1**	**0**

PEARL
Manning the door limits the amount of oxygen supplied to the fire. It is the cheapest ventilation control available.

Roof cuts	
Cut	**Purpose**
Louver cut	Cut panels are tilted into the opening, using each roof support as a fulcrum, like hinged louvers
Triangular cut	Preferred on metal decking; it prevents the cut metal from rolling away and sliding into the opening
Trench (strip) cut	A defensive cut from one exterior wall to the other, stopping horizontal spread through the attic or cockloft of long narrow buildings such as strip malls
Kerf cut	A single narrow examination cut

Water Supplies

Share of the exam	Tables	Tested facts
3 to 9%	**1**	**0**

Hydrant colour classes at 20 psi residual	
Colour	**Flow**
Red	Under 500 gpm
Orange	500 to 999 gpm (Class B)
Green	1000 to 1499 gpm
Light blue	1500 gpm or more

Ropes

Share of the exam	Tables	Tested facts
3 to 9%	**2**	**0**

Rope types

Rope	Rule
Life safety rope	7/16 in. to 5/8 in., minimum breaking strength 8,992 lbf (40 kN)
Escape rope	A single emergency self-rescue by one person; not reused
Utility rope	Never relied upon to support a human load
Polypropylene	Floats and resists snagging on underwater hazards, though it is weaker

Parts of a rope

Part	Role
Working end	Forms the knot
Running end	Used for lifting or hoisting
Standing part	The section between the working end and the running end
Bight	A bend in the rope

Rescue Operations

Share of the exam	Tables	Tested facts
1 to 5%	**2**	**0**

Search methods	
Method	**How it works**
Standard search	The team stays together, following an outside wall in a left-handed or right-handed pattern, shoulder against the wall
Oriented search	The officer remains outside the rooms, monitoring the searchers' safety, air supply and the progress of the fire
Team search	For large open structures with limited visibility, such as warehouses, or locating a lost fire fighter
Door marking	A slash means a search is in progress; an X means the search has been completed
Single-family benchmark	One or two teams can search all rooms in 15 minutes or less

PEARL

Close the door of the room you are searching. It isolates the room from the fire flow path and keeps it tenable for a few extra minutes. And if you are lost on a hose line, follow it toward the male coupling, which leads back to the apparatus and the exit.

Extrication tools	
Tool	**Job**
Hydraulic spreader	Applies several tons of force on a very small area for vehicle and machinery extrication
Reciprocating saw	Cuts metal during extrication of a victim from a motor vehicle
Spring-loaded centre punch	Breaks tempered automobile glass by disrupting its integrity at a pinpoint
Cutting torch	Cannot be used where flammable fuels are present, because its extreme heat could ignite them

Forcible Entry

Share of the exam	Tables	Tested facts
1 to 6%	**1**	**0**

PEARL
Try before you pry. Checking whether a door is unlocked first minimises unnecessary property damage and delay.

Tool identification

Tool	What it does
Halligan pick end	Makes holes, drives through locks and shackles, or breaks glass; the blade pries and the fork gives mechanical advantage
Maul	6 lb (3 kg) or more, axe on one side of the head and sledgehammer on the other
Sledgehammer	Head weighs anywhere from 2 to 20 lb (1 to 9 kg)
Bolt cutters	Cut through chains or padlocks to open doors or gates
Rabbit tool	Hand-powered hydraulic tool designed to quickly open doors
Shove knife	For outward-swinging doors; works only on a limited number of wooden-frame doors, not metal frames
San Francisco hook	Built-in gas shut-off and directional slot, useful for forcible entry and ventilation

Fire Control

Share of the exam	Tables	Tested facts
1 to 6%	**0**	**0**

No tables or tested facts in this domain yet; the guide covers it in prose. The share above is still the real exam's.

Fire Department Communications

Share of the exam	Tables	Tested facts
1 to 7%	**1**	**2**

Radio hardware	
Item	**What it is**
Portable radio	Hand-held, battery-operated two-way radio a fire fighter carries, with limited transmitting power
Mobile radio	Permanently mounted in a vehicle
Base station	Mounted in a fixed building or tower site
Repeater	Receives a weak signal on one frequency and automatically rebroadcasts it at full base-station power on a second frequency

TESTED

- [x] A mayday is declared for being lost, trapped, experiencing SCBA failure or running out of air. Report air remaining in the cylinder, or your last assignment, as part of the mayday.
- [x] The generally accepted performance objective is about 90 seconds from call receipt to dispatch.

Ground Cover Fire Fighting

Share of the exam	Tables	Tested facts
1 to 7%	**1**	**1**

Parts of a wildland fire	
Part	**Definition**
Head	The travelling edge advancing most rapidly into new fuel
Heel (rear)	Stays near the area of origin
Flank	The edge running parallel to the direction of spread, between head and heel
Finger	A narrow secondary extension
Pocket	Unburned fuel between a finger and the main body, surrounded by fire on three sides and dangerous to crews caught inside

TESTED

- [x] The safety zone is four times the flame height. The three named safety areas are fire behaviour, fireline safety and organisational control.

Building Construction

Share of the exam	Tables	Tested facts
1 to 5%	**2**	**0**

Construction numbers

Item	Value
Type I	Fire-resistive construction (a 2 hour rating appears as a named figure)
Traditional floor under fire	Lasts about 19 minutes
Lightweight floor under fire	Lasts about 6 minutes
Thermoplastic	Melts and drips, sometimes as low as 500 degrees Fahrenheit

Construction types

Type	Defining trait
Type I, fire-resistive	Noncombustible with at least a 2 hour fire-resistance rating, interiors divided into compartments
Type II, noncombustible	Also noncombustible, but typically a large single-storey building without the compartmentation or rating
Type III, ordinary	Masonry exterior walls with wood interior framing, so contents and combustible structure both fuel a fire
Type IV, heavy timber	Masonry exterior with solid or laminated wood interior, posts about 8 in. square and beams about 14 in. deep, and no concealed spaces

Portable Extinguishers

Share of the exam	Tables	Tested facts
1 to 6%	**1**	**1**

Traditional class symbols	
Class	**Symbol**
A	Green triangle
B	Red square
C	Blue circle
D	Yellow five-pointed star

TESTED

- [x] Operation is PASS: Pull the pin, Aim the nozzle, Squeeze the trigger, Sweep across the base of the fire.

Fire & Life Safety Initiatives

Share of the exam	Tables	Tested facts
1 to 5%	**0**	**1**

TESTED

- [x] NFPA 72 minimum smoke alarm placement for new construction: one on each level of the house, one in the corridor or hallway outside each sleeping area, and one in each bedroom.

Fire Cause & Origin

Share of the exam	Tables	Tested facts
1 to 5%	**0**	**1**

TESTED

- [x] Where you find something suspicious, leave it in place, make sure no one interferes with it or the surrounding area, and report it.

Orientation & Fire Service History

Share of the exam	Tables	Tested facts
3 to 9%	**1**	**0**

Historical milestones

Event	Detail
Familia Publica, about 24 BC	Augustus Caesar's force of roughly 600 slaves; ineffective because they had little incentive to take risks
Corps of Vigiles, about 60 AD	7000 free men under Nero; adopted the Roman military rank structure that still shapes fire department ranks
First paid US fire department	Boston, 1679, which also had the first fire stations and engines
First volunteer fire company	Philadelphia, 1735, under Benjamin Franklin; citizens kept filled water buckets outside their doors
Fire hydrant, 1817	Frederick Graff Sr.; valves called fireplugs tapped the water pipe system
Steam-powered pumper, 1829	Replaced Richard Newsham's 1720 hand-powered pumpers; volunteers resisted the heavy horse-drawn machines
Triangle Shirtwaist Factory Fire	146 deaths; the real precursor to NFPA 101, the Life Safety Code

Sources this sheet is checked against

- Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), fire hose
- Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), hose construction and couplings
- Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), supply line and attack line evolutions

Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), personal protective equipment and SCBA

Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), personal protective equipment

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Fundamentals of Fire Fighter Skills (IAFC / NFPA / Jones & Bartlett), fire streams

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