



## Ohio Administrative Code

### Rule 4123:1-21-01 Scope and definitions.

Effective: [September 1, 2026](#)

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#### (A) Scope.

The purpose of Chapter 4123:1-21 of the Administrative Code is to provide reasonable safety for life, limb, and health of employees.

The specific requirements of this chapter are minimum requirements of an employer for the protection of such employer's employees and no others, and constitute protective standards for all regular members of lawfully constituted fire departments of municipal corporations and townships, whether paid or volunteer, and employees employed in private or contractual-type fire departments that serve the public, who are engaged in the act of fire fighting. The requirements of this chapter do not apply to employees employed in industrial fire brigades, industrial fire departments, and private or contractual-type fire departments that do not serve the public. To the extent that any other codes of specific requirements adopted by the bureau of workers' compensation may conflict with the requirements of this chapter, this chapter shall prevail.

Unless otherwise indicated, materials or equipment bought or contracted for prior to the effective date of any requirement of this chapter shall be deemed to comply with the provisions of these requirements, if such materials or equipment complies either with the provisions of these requirements or with the provisions of any applicable specific requirement that was in effect at the time contracted for or bought.

#### (B) Definitions.

- (1) "Aerial device": An aerial ladder, elevating platform, aerial fire apparatus, or water tower that is designed to position personnel, handle materials, provide egress, and discharge water.
- (2) "Aerial ladder": A self-supporting, turntable-mounted, power-operated ladder of two or more sections permanently attached to a self-propelled automotive fire apparatus and designed to provide a continuous egress route from an elevated platform to the ground.
- (3) "Air flow control device": a manual or automatic device incorporated in the air flow system of a self-contained breathing apparatus to control the free flow of air to the facepiece during donning or doffing.
- (4) "Angle of approach": the smallest angle made between the road surface and a line drawn from the front point of ground contact of the front tire to any projection of the apparatus in front of the front axle.



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- (5) "Angle of departure": the smallest angle made between the road surface and a line drawn from the rear point of ground contact of the rear tire to any projection of the apparatus behind the rear axle.
- (6) "Attack hose": hose designed to be used to combat fires beyond the incipient stage to supply handline nozzles, distributor nozzles, master stream appliances, portable hydrants, manifolds, standpipe and sprinkler systems, pumps, and fire department pumpers.
- (7) "Attic extension ladder": an extension ladder that is specifically designed to be used to gain entry through a scuttle, hatch, or other restricted opening.
- (8) "Base section": the lowest, or widest, section of non-self-supporting ground ladders.
- (9) "Beam" or "side rail": the main structural side of a ground ladder.
- (10) "Bedded position": the position in which fly section(s) of extension ladders are stored in the nonextended position with the pawls resting on a rung of the supporting section.
- (11) "Booster hose": a hose having a rubber tube, a braided or spiraled reinforcement, and an outer protective cover. It is intended for use on fire apparatus.
- (12) "Butt": the end of the beam placed on the ground or other lower support surface when ground ladders are in the raised position. It may be the lower end of beams or added devices.
- (13) "Butt spurs": Also known as "safety feet," that component of ground ladder support which is in contact with the lower support surface to reduce slippage. It may be the lower end of beams or added devices.
- (14) "Chin strap": an adjustable strap fitting under the chin to secure the helmet to the head.
- (15) "Coat" or "protective coat": a garment worn to protect the upper part of the body except the hands and head.
- (16) "Combination ladder": a ground ladder capable of being used both as a step ladder and single or extension ladder.
- (17) "Crown straps": the part of a suspension system that passes over the head.



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- (18) "Dangerous to life or health": conditions that pose a threat to life or health, or conditions that pose a threat of severe exposure to contaminants, such as radioactive materials, which are likely to have adverse cumulative or delayed effects on health.
- (19) "Ear covers": an interface component of the protective helmet element that provides limited protection to the helmet/coat interface area.
- (20) "Elevating platform": a self-supporting, turntable-mounted device consisting of a personnel-carrying platform attached to the uppermost boom of a series of power-operated booms that articulate, telescope, or both.
- (21) "Employee": For purposes of this chapter, a member of a lawfully constituted fire department of a municipal corporation or township, whether paid or volunteer, or an employee of a private or contractual-type fire department that serves the public, that is engaged in the act of fire fighting.
- (22) "Employer": For purposes of this chapter, a lawfully constituted fire department of a municipal corporation or township, including volunteer fire departments, or a private or contractual-type fire department that serves the public.
- (23) "Energy-absorbing system": a material or suspension system, or combination thereof, incorporated into the design of a helmet to attenuate impact energy.
- (24) "Escape rope": a single-purpose emergency self-escape/self-rescue rope which has a diameter of nineteen sixty-fourths inch (7.5 millimeters) or greater and less than one and three-sixteenths inches (30.2 millimeters).
- (25) "Extension ladder": a non-self-supporting ground ladder that is adjustable in length. It consists of two or more sections traveling in guides, brackets, or equivalent, so arranged as to permit length adjustment.
- (26) "Face/neck shroud": an item of protective clothing used in wildland fire fighting that attaches to the helmet to provide minimum thermal protection to the face and neck area.
- (27) "Faceshield": limited protection for the face, eyes, or portions thereof.
- (28) "Fire apparatus": the emergency vehicle(s) of the fire department used for fire suppression.
- (29) "Fire shelter": an item of protective equipment configured as an aluminized tent to reflect radiant heat in a fire entrapment situation.



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- (30) "Flame-resistant": the property of a material whereby the application of a flaming or nonflaming source of ignition and the subsequent removal of the ignition source results in the termination of combustion.
- (31) "Fluorescent": the property of a material by which radiant energy of certain wavelengths is absorbed and reradiated nonthermally in other, longer wavelengths.
- (32) "Fly section": the upper section(s) of an extension ladder. The first section above the base section is the first fly section, and the second section above the base section is the second fly section.
- (33) "Folding ladder": a single ladder designed so that the rungs can be folded or moved in a manner to allow the beams to be brought into a position of touching each other, or nearly touching each other, for storage or carrying purposes.
- (34) "Gauntlet": the circular, flared, or otherwise expanded part of the glove that extends beyond the opening of the glove body.
- (35) "Goggles": the helmet component intended to help protect the wearer's eyes and a portion of the face.
- (36) "GAWR": acronym for gross axle weight rating. The value specified as the load-carrying rating of a single axle system, as measured at the tire ground interfaces.
- (37) "GCWR": acronym for gross combination weight rating. The value specified as the loaded weight of a combination vehicle.
- (38) "GVWR": acronym for gross vehicle weight rating. The value specified by the chassis manufacturer as the loaded weight rating of a single vehicle.
- (39) "Ground ladder": ladders not mechanically or physically attached permanently to fire apparatus and not requiring mechanical power from the apparatus for ladder use and operation.
- (40) "Halyard": rope used on extension ladders for the purpose of raising the fly section(s). A wire cable may be referred to as a halyard when used on the uppermost fly section(s) of three or four section extension ladders.
- (41) "Hard suction": a rubber-lined, rubber-covered hose whose reinforcement contains a semi-rigid or rigid helix to resist collapse under vacuum.
- (42) "Hazardous atmosphere":



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- (a) Any atmosphere containing a toxic or disease-producing gas, vapor, dust, fume, or mist dangerous to the life or health or where the concentration is unknown; or
- (b) Any atmosphere containing an oxygen partial pressure of less than 19.5 per cent by volume at sea level.
- (43) "Hazardous environment": the area where members might be exposed to a particular substance, device, event, circumstance, or condition that presents a danger to members of the fire department.
- (44) "Headband": the portion of a suspension system that encircles the head.
- (45) "Heat sensor label": a label that turns color at a preset temperature to indicate a specific heat exposure.
- (46) "Inside width": the distance measured from the inside edge of one beam to the inside edge of the opposite beam of a ladder.
- (47) "Ladder belt": a belt intended for use as a positioning device for a person on a ladder. It fastens around the waist only.
- (48) "Ladder/escape belt": a belt intended as both a ladder belt and an escape belt for use by the wearer only as an emergency self-rescue device. It fastens around the waist only.
- (49) "Large-diameter supply hose": hose of three and one-half inch (eighty-nine millimeters) diameter or larger used to move large volumes of water.
- (50) "Life safety harness": harness used to support persons during fire service rescue.
  - (a) Class I: harness that fastens around the waist and around thighs or under buttocks; designed to be used for emergency escape with a design load of three hundred foot-pounds (four hundred seven joules).
  - (b) Class II: harness that fastens around the waist and around the thighs or under the buttocks; designed for rescue with a design load of six hundred foot-pounds (eight hundred thirteen joules).
  - (c) Class III: harness that fastens around the waist, around the thighs or under the buttocks, and over the shoulders; designed for rescue with a design load of six hundred foot-pounds (eight hundred thirteen joules) that may be encountered and where inverting may occur.



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- (51) "Life safety rope": rope dedicated solely to the purpose of constructing lines for supporting persons during fire rescue, fire fighting, or during training activity.
  - (a) "Technical use": rope having a diameter of three-eighths inch (9.5 millimeters) or greater and less than one-half inch (thirteen millimeters).
  - (b) "General use": rope having a diameter of seven-sixteenths inch (thirteen millimeters) or greater and not more than five-eighths inch (sixteen millimeters).
- (52) "Maximum extended length": the total length of an extension ladder or a combination ladder when all fly sections are fully extended and pawls engaged.
- (53) "Optical warning device": a manufactured assembly of a single optical light emitter or a fixed array of any number of optical light emitters.
- (54) "PASS": acronym for personal alert safety system. Devices that sense movement or lack of movement, and that automatically activate an audible alarm signal (which also can be manually activated) to alert and to assist others in locating a firefighter who is in danger.
- (55) "Pawls": devices attached to fly sections for the purpose of anchoring fly sections, when extension ladders are used in the extended position. Pawls engage ladder rungs near the beams for anchoring purposes.
- (56) "Permanent deformation": that deformation remaining in any part of a ladder or its components after all test loads have been removed from the ladder.
- (57) "Pompier ladder": Also known as a "scaling ladder," a ladder having a single center beam only and with a large hook on top, used for scaling.
- (58) "Prescribed fire": any fire ignited by management actions under certain predetermined conditions to meet specific land management objectives.
- (59) "Protective hood": a garment worn under a helmet to protect the exposed portions of the head, face, and neck.
- (60) "PTO": acronym for power takeoff.
- (61) "Quantitative fit test": an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.
- (62) "Retention system": the complete assembly by which a helmet is retained in position on the head.



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- (63) "Retroreflective": describes material that reflects and returns a relatively high proportion of light in a direction close to the direction from which it came.
- (64) "Roof ladder": a single ladder equipped with hooks at the top end of the ladder.
- (65) "Rungs": the ladder crosspieces on which a person steps while ascending or descending.
- (66) "Safety factor": the ratio between the ultimate breaking stress and the working stress of the material, structure, or device.
- (67) "Self-contained breathing apparatus" or "SCBA": a device providing the wearer with a supply of respirable gas carried in or generated by the apparatus. When in use, this apparatus requires no intake of air from the environment in which the wearer is operating.
  - (a) "Closed circuit SCBA": an apparatus of the type in which the exhalation is rebreathed by the wearer after the carbon dioxide has been effectively removed and a suitable oxygen concentration restored.
  - (b) "Open circuit SCBA": an apparatus of the following types from which exhalation is vented to the atmosphere and not rebreathed:
    - (i) "Demand type": an apparatus in which the pressure inside the facepiece, in relation to the immediate environment, is positive during exhalation and negative during inhalation. This type of SCBA is prohibited by rule 4123:1-21-02 of the Administrative Code.
    - (ii) "Positive-pressure type": an apparatus in which the pressure inside the facepiece, in relation to the immediate environment, is positive during both inhalation and exhalation.
- (68) "Service tests": tests to be performed on a regular basis after a ground ladder is in service to determine its suitability for service.
- (69) "Shall": to be construed as mandatory.
- (70) "Shell": the outermost part of a helmet.
- (71) "Single ladder": a non-self-supporting ground ladder, non-adjustable in length, consisting of only one section.
- (72) "Split shaft PTO": a PTO drive system that directs the chassis power either to the pump or to the chassis drive axle. This is accomplished by splitting the



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chassis driveline that connects the chassis transmission to the drive axle and inserting the split shaft PTO that has the shift mechanism necessary to direct the engine power as described above.

- (73) "Stabilizer": a device integral with or separately attached to the chassis of an aerial fire apparatus that is used to increase the moments tending to resist overturning the apparatus.
  - (a) "Stabilizer pad": a plate inserted beneath a stabilizer shoe to give greater surface bearing area.
  - (b) "Stabilizer shoe": a permanently mounted shoe on a stabilizer to provide a ground surface area.
- (74) "Staypoles": poles attached to each beam of the base section of extension ladders and used to assist in the raising of the ladder and to help provide stability to the raised ladder.
- (75) "Structural fire fighting": the physical activity of fire rescue, fire suppression, or both, at buildings, enclosed structures, vehicles, vessels, or like properties that are involved in a fire or a situation where there is the potential for fire.
- (76) "Supply hose": hose of three inch (seventy-six millimeter) diameter or larger designed for the purpose of moving water between a pressurized water source and a pump that is supplying attack lines.
- (77) "Suspension system": an energy attenuating system made up of headband and crown straps.
- (78) "Thermal protective performance": measurement of the amount of heat transfer through the protective ensemble from a thermal exposure equal to flashover conditions that results in second degree burn damage to the wearer's skin as related to the time of heat exposure.
- (79) "Throwline": a floating one-person rope that is intended to be thrown to a person during water rescues or as a tether for rescuers entering the water.
- (80) "Tip": as used with respect to ladders, the end of the beam opposite the butt.
- (81) "Trouser" or "protective trouser": a garment worn to protect the lower part of the body, except the feet.
- (82) "Ultimate failure": collapse of a ground ladder structure or component thereof.



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- (83) "Unlined hose": a hose, usually made of linen yarns, consisting of only the woven jacket, and having such qualities that the yarn of the jacket swells when wetted, tending to seal the hose. This type of hose is to be used primarily for wildland or forestry fires.
- (84) "Water tower": a device consisting of permanently mounted, power-operated booms and a waterway designed to supply a large capacity mobile elevated water stream. The booms may be of articulating design or telescoping design and may be equipped with a ladder.
- (85) "Wildland fire fighting": the activities of fire suppression and property conservation in woodlands, forests, grasslands, brush, prairies, and other such vegetation, or any combination of vegetation.
- (86) "Wristlet": an attachment, fitted to the top of a glove or to the sleeve of a protective coat, to completely cover the wrist area under all conditions.