

4-1 Structural firefighting Protective Ensemble

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Background

Firefighters are provided with structural firefighting protective ensembles for use during structural firefighting operations and other emergency response activities where the ensemble is appropriate for the anticipated hazards.

Concerns/hazards

Firefighters are exposed to hazards during the course of their work and require appropriate personal protective equipment (PPE).

A structural firefighting protective ensemble provides protection from some, but not all, risks of emergency incident operations. It may not be appropriate PPE for all incidents or all tasks, particularly where the primary hazard is not structural firefighting, or where heat stress, reduced mobility, added weight, contamination, or task-specific hazards must be considered.

Actions for employers

Employers must:

- evaluate the appropriateness of using structural firefighting protective ensembles as PPE for certain activities, particularly during the summer months
- consult with their joint health and safety committees or health and safety representatives on alternative protection and guidelines for use
- ensure that PPE is appropriately sized to provide effective protection (as per regulation)

Structural Firefighting Protective Ensemble

Protective ensemble refers to the combination of 'bunker gear' (coat and pants), helmet, protective hood, firefighting boots and firefighting gloves.

Bunker gear may not be appropriate PPE for all incidents, considering the potential for heat stress, reduced mobility and added weight.

Structural Firefighting Protective headwear

Firefighters exposed to the hazards of head injury must wear appropriate PPE, which may include helmets.

Structural Firefighting Protective Helmets

A structural firefighting Protective helmet is not designed to protect personnel from all conditions or hazards. It provides limited protection to the head when worn during structural firefighting activities. Other types of emergency calls, such as water rescue, will require head protection specifically designed for that activity.

Structural firefighting protective helmets are not designed for crash protection and should not be worn, and should be stowed securely when riding in the enclosed cab and crew area of fire service vehicles.

Structural Firefighting Protective hoods (or Particulate Blocking Hood)

Protective hoods should be worn whenever there is a risk of injury from heat and/or flame to exposed skin. Helmet liners should be used in addition to protective hoods.

Structural firefighting Protective Footwear and gloves

Firefighters exposed to the hazard of foot or hand injury must wear structural firefighting protective footwear and structural firefighting protective gloves appropriate in the circumstances.

Applicable regulations and acts

Read:

- [*Occupational Health and Safety Act*](#)
 - clause 25(1)(b) for maintaining equipment in good condition
 - clause 25(2)(h) for taking every precaution reasonable in the circumstances to protect workers
- [*O. Reg. 714/94 - Firefighters – Protective Equipment Regulation*](#)
 - section 4 for wearing head protective equipment
 - section 5 for structural firefighting protective garment requirements

Applicable standards

- [*NFPA 1850*](#) – Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural and Proximity Firefighting and Open-Circuit Self-Contained Breathing Apparatus (SCBA).
- [*NFPA 1970*](#) – Standard on Protective Ensembles for Structural and Proximity Firefighting, Work Apparel, Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, and Personal Alert Safety Systems (PASS).

Related

Read firefighter guidance notes:

- [4-2 Eye protection](#)
- [4-8 Care, maintenance, inspection and replacement of structural firefighting personal protective equipment](#)

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