



## Personal Protective Equipment For Firefighters

For many municipal operations, personal protective equipment (PPE) is viewed as a last resort, but necessary to protect employees. For firefighters, using good PPE is vital to guarding their lives. Firefighters need the best materials and technologies incorporated into their protective clothing to allow them to attack fires, encounter dangerous conditions, and increase their visibility during emergencies. However, issues arise with the best equipment, as it adds significant weight to the person donning it and becomes much less effective after years of wear and tear.

Proper firefighter turnout gear, weighing about 45 pounds, includes boots, pants, a coat, gloves, a hood with mask, and a protective helmet. In addition, the weight can vary greatly depending on what extra gear and equipment a firefighter carries, like a self-contained breathing apparatus, axe, or other safety item. Firefighter gear is also likely to become wet or soaked, resulting in added weight. Consider comfort, size, wearability, fire protection, and reflectivity when issuing and wearing gear. Firefighters wear this Personal Protective Equipment (PPE) to protect them from the many hazards they face while conducting dangerous operations, including:

- Heat
- Smoke and gasses
- Chemicals compounds released by modern fires
- Biological, radiological, nuclear, and high-yield explosives (CBRNE) hazards

To protect against these hazards, proper gear and maintenance of that gear can greatly help to reduce and prevent injuries.

- Gloves: Gloves should fit well and provide dexterity. Some gloves have a thermal protection layer and a moisture barrier.
- Helmet: It should have a secure chin strap.
- Boots: Boots should be flexible and provide impact and underside protection.
- Gas masks and respirators: Use these to protect firefighters from breathing harmful chemicals.



- Bluetooth headsets and lighting: These allow firefighters to better assess dangerous situations, like those in low light.
- Gear bags: Protect PPE and other equipment from external contamination.
- Clothing under gear: Firefighters should also wear non-melting and non-ignitable clothing under their gear.

Significant information relevant to safety gear:

- The useful life of turnout gear is generally 10 years, so abide by your manufacturer's recommendations for replacement
- Clean turnout gear with an extractor at the firehouse
- Emphasize decontamination at the scene
- Complete routine gear inspection and consider a thorough annual inspection using a professional, contracted service

