



**Jeffrey O. and Grace G. Stull**

PPE Update

## **Is your firefighting PPE certified, and what does that mean?**

**PPE certification is not a guarantee of protection, but it does let fire departments know which products have been test to the minimum performance standard**

Aug 19, 2014

---

Mandatory third-party certification has been in place for firefighter PPE since the early 1990s. In the approximate 25 years since its introduction, this requirement has helped the fire service better recognize products that comply with the various National Fire Protection Association standards.

Prior to that time, product manufacturers were allowed to do their own testing and self-declare that their gear met the respective standards. While some may argue that certification goes too far and adds unnecessary cost to protective clothing and equipment, the vast majority of end users agree that certification makes their lives easier and safer.

The process of establishing standards for turnout gear and other forms of emergency response clothing and equipment entails deciding on the right type of requirements to offer minimum levels of protection and how compliance with the requirements is properly demonstrated.

All NFPA standards for PPE include requirements for third-party certification. As the name implies, this certification is carried out by an organization that is independent of the manufacturer and thus offers an impartial assessment.

In fact, NFPA specifies that only organizations that are accredited specifically for certifying protective clothing and equipment can perform certification. In addition, certification organizations have to demonstrate competency in being able to run the various tests found in each the standards and have those capabilities accredited as well.

## **Certifying the certifiers**

Even the accreditation organizations that qualify the certification organizations themselves have to be accredited. The hope is that this process manages to prevent any slipshod practices, whether intended or not, from bringing unsuitable gear to the marketplace.

Though the process is not perfect, fire service PPE certification entails one of the highest quality conformity assessment processes of any protective clothing and equipment in world.

Certification is much more than just testing against the requirements in a standard. It entails a much more thorough review to ensuring that products will conform to the standard.

The actual testing is relatively limited. In most cases, only a few samples are subjected to various tests and evaluations. This level of sampling is by no means statistically representative of the large numbers of product that are manufactured.

## **Quality-assurance programs**

Certification relies on the manufacturer's implementation of a comprehensive quality-assurance program. It provides details of the manufacturing process to enable consistent material and component selection as well as their assembly into a final product the same way each time.

A good program is about recordkeeping and the ability to trace each part that goes into a product's construction. The certification organization must review the manufacturer's quality-assurance program and audit this process at least twice a year.

Auditors collect samples from various manufacturing plants and send them to the laboratory for follow-on testing. This will determine if the product still meets the requirements in the standard. Thus, certification is an ongoing process and not just one-time qualification.

Certification organizations will only certify products that have completely met all requirements in the standard as well as any others the certification organization has. For example, certification organizations generally require manufacturers to have certain minimum levels of product liability insurance — NFPA has several requirements such as having programs for safety alerts and product recall.

## **No guarantee**

Certification organizations are also responsible for investigating any complaints of malperformance in the field of any certified product.

If a fire department finds a problem with a particular product and thinks it is related to its certification, the certification organization is obliged to look into the matter, conduct an investigation if warranted and report its findings back to the organization initiating the complaint.

The fire service relies on products being certified to knowing whether a product is appropriate or not. In general, this reliance is a good thing because individual first responders have some confidence that the product meets a minimum standard.

On the other hand, meeting the minimum standard is no guarantee that protection will be offered to first responders in all cases. Many departments choose to exceed the minimum requirements and rely on the certification data as the prerequisite for considering any product for implementation within their own organization.

### **Labeled**

Questions arise all the time as to whether products are certified. All certified products a label indicating that the product meets the respective NFPA standard. This statement is exact wording from the standard itself that must be put on the label clearly identifying the standard and the edition of that standard.

In addition, the product label must also display the certification organization's mark or logo as evidence of certification. Each certification organization will only permit those manufacturers that fully qualify within their own programs to use their mark. Fraudulent use of a certification organization's mark will lead to legal action.

Firefighters also can go to the certification organization's web site to determining whether the product is listed. Third-party certification requires products be listed when certified.

Each certification organization maintains a list of certified products to the different standards for which it provides certification services. The two principal certification organizations in the U.S. are the Safety Equipment Institute [seinet.org](http://seinet.org) and Underwriters' Laboratories [ul.com](http://ul.com).

### **Code cracker**

The most effective way to find all products listed to a given standard is to have the category code.

These category codes vary with each standard. Some common product category codes for the UL website for certified structural firefighting clothing against NFPA 1971 include QGVC for garments and hoods, QGVC for helmets, QGVA for gloves, and QGVK for footwear.

The actual listings will indicate specific manufacturer and the respective products have been certified. In most cases, products are identified by their model number and may include a list of certain features that have been qualified.

The way that different manufacturer products are broken down into these listings may vary with the certification organization, but generally there should be some identifier such as a model or style number that can be used to identify the correct product.

If the product you are inquiring about is not in the list then you should first check with the manufacturer and then the certification organization.

### **Ever changing**

NFPA standards' certification is not indefinite; it is an ongoing and has a limited life. Approximately every five years, NFPA standards are updated through a revision process.

In all cases, products have to be certified to the newest edition at the time they are manufactured at some fixed time after the standard's new edition has been released. This means that only current certified products can be listed.

This further means that products cannot be certified to older editions and that products after grace period must be removed from the shelves unless certified to the new edition of the standard.

Products in the field are grandfathered to the standard when they were certified. An existing product does not fall out of compliance just because a new edition of a standard has been introduced.

Our hope is that all fire and emergency service organizations use only products that comply with the NFPA standards. These standards include certain rigors to impose minimum requirements deemed to provide appropriate levels of minimum protection to firefighters and other first responders.

The standards cannot guarantee protection under all conditions, yet the use and recognition of certified products is one way to help minimize the risks of the extremely hazardous work undertaken by the fire and emergency services.


## About the author

Sponsored by [Globe](#)

Jeffrey and Grace Stull are president and vice president, respectively, of International Personnel Protection, Inc. They are members of several NFPA committees on PPE as well as the ASTM International committee on protective clothing. Mr. Stull was formerly the convener for international work groups on heat/thermal protection and hazardous materials PPE as well as the lead U.S. delegate for International Standards Organization Technical Committee 94/Subcommittees on Protective Clothing and Firefighter PPE. They participate in the Interagency Board for Equipment Standardization and Interoperability and have authored the book, "[PPE Made Easy](#)." Send questions or feedback to the Stulls via [email](#).

Tags > [Personal Protective Equipment](#) • [Safety](#)

## JOIN THE DISCUSSION




 <p>Be the first to comment</p>	<p>Please <a href="#">sign in</a> or <a href="#">register</a> to write your own comments below. Before commenting, please read <a href="#">FireRescue1's Commenting Policy</a></p>
--	--

## LATEST PRODUCT NEWS

- [Don't ditch your helmet for rescue missions – just find the right one](#)
- [4 ways to tap the potential of data and use it to improve community health and safety](#)
- [Maine FFs call on state CDC to prioritize first responder virus tests after FD outbreak](#)
- [The contamination is coming from within the building](#)
- [Purging Mr. Hyde: 3 ways to cultivate the good within our ranks](#)

[MORE PRODUCT NEWS >](#)

## PRODUCT ORIGINALS

- [Don't ditch your helmet for rescue missions – just find the right one](#)
- [Beyond the traditional fire-rescue mission: Loveland's TAC Fire](#)  1
- [COVID-19: How public safety companies are assisting the frontline pandemic response](#)  1
- [Face masks: Here's what cops, firefighters, medics and COs have to say about use, policy and effectiveness](#)
- [Fire service proximity suits: What firefighters need to know](#) 

[MORE PRODUCT ORIGINALS >](#)

Copyright © 2020 FireRescue1. All rights reserved.