

# Primer on Helmet-Mounted Eye Protection for Fire Fighting



## Summary:

Helmet-mounted eye protection for fire fighting is a much-discussed issue that is covered by two primary standards: an equipment performance standard, and an occupational health and safety standard. This primer will explain these two standards and how they impact eye protection selection for fire fighting.

### **NFPA 1971: Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2007 Edition – A product minimum performance standard**

NFPA 1971, 2007 Edition is the standard that sets the minimum performance level for structural fire fighting personal protective equipment. For eye protection, NFPA 1971 requires that fire helmets come with either a protective face shield or goggles. Design and performance requirements within the standard set minimum acceptable performance levels for many parameters, including the following:

- 】 Lens impact
- 】 Heat and flame resistance
- 】 Field of view

### **NFPA 1500: Standard on Fire Department Occupational Safety and Health Program, 2007 Edition**

NFPA 1500, 2007 Edition is the standard that dictates how occupational safety and health is to be maintained. NFPA 1500 requires the use of “primary” eye protection whenever a fire fighter is operating on a fire ground without an SCBA face piece in use. Within NFPA 1500, primary eye protection is defined as eye protection that meets the spectacle or goggle requirements of ANSI/ISEA Z87.1, which is an additional product performance standard.

#### **What does it mean for me?**

Fire helmets can be purchased with goggles that meet the performance requirements of both NFPA 1971 and NFPA 1500. They can also be purchased with eye protection that meets the requirements of NFPA 1971 but not the primary eye protection requirements of NFPA 1500; an example of this would be a standard four-inch (4”) face shield made from either polycarbonate or polyarylate (Tuffshield) materials.

#### **What solutions does MSA offer?**

MSA has two solutions for fire helmet eye protection that meet the requirements of both performance standards. Like other manufacturers, MSA offers a wide range of goggles. Unique to the industry is the MSA Cairns Defender® Visor. The Defender Visor was recently confirmed to be compliant as a “spectacle” under the definitions in NFPA 1500. This means that the Defender Visor can be used as primary eye protection during fire ground operations.

**Note:** This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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