

In the fall of 2012, NFPA 1971 will reflect several changes, and structural fire helmet manufacturers will have twelve months to modify their products to be in compliance with these updates.

What is changing?

EYE AND FACE PROTECTION

While previous versions of NFPA 1971 included only a few ANSI optical impact tests, NFPA 1971:2013 adopts the full ANSI/ISEA Z87.1-2010, Occupational and Educational Personal Eye and Face Protection Devices standard. This means that faceshield and goggle components must meet the respective requirements for faceshields or goggles for both the NFPA and ANSI/ISEA standards. They also must be marked "Z87+" in accordance with ANSI/ISEA Z87.1-2010.

HELMET POSITIONING INDEX (HPI)

The previous version of NFPA 1971 mentioned helmet positioning, but it was not enforced across all tests. NFPA 1971:2013 mandates that the HPI must be established during the Electrical Insulation Test [see Figure 8.31.5.1.2], and the same HPI must be carried through to all remaining tests (Acceleration, Top Force, Penetration, Optical Impacts, etc.).

This is important because, in previous revisions, fire helmet manufacturers could use a different HPI for each test. As a result, a helmet's positioning could be changed from test to test so that the helmet would earn passing marks and attain certification. The new HPI rules ensure that a helmet will maintain a consistent position across all tests, which will 1.) Minimize the potential for misleading test results and 2.) Drive helmet design improvements that will provide further protection to firefighters.

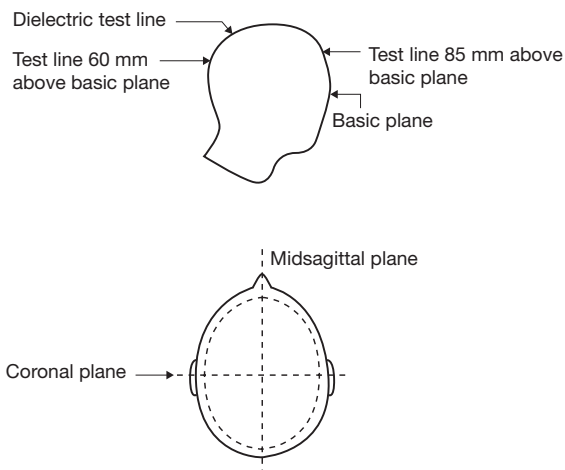
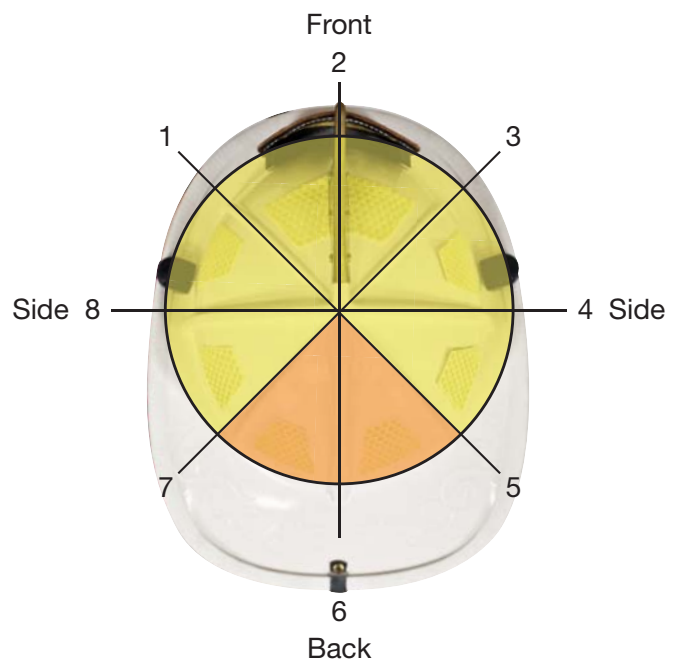


FIGURE 8.31.5.1.2

HEAT AND THERMAL SHRINKAGE RESISTANCE TEST

During the heat and thermal shrinkage resistance test, a helmet is placed in a 500°F oven for five minutes to see if and how much the helmet droops due to the heat exposure. In the previous NFPA 1971 editions, the amount of droop was loosely defined.

In NFPA 1971:2013, the standard offers a more complete definition of the test and clarifies the analysis of the helmet droop. The left side, front and right side of the helmet (highlighted in yellow) are not allowed to droop beyond 30mm. Any item that is shipped from the manufacturer attached to the helmet (e.g. Bourke visor, faceshields and goggles) must pass this test as well. The back of the helmet (highlighted in orange) is not allowed to droop beyond 40mm.



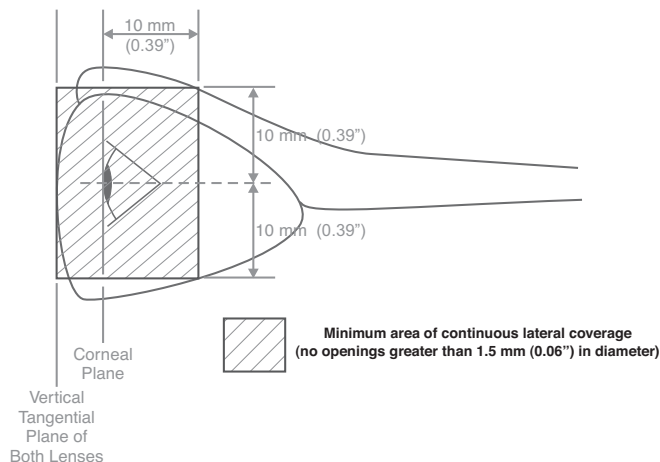
HOW DOES THIS AFFECT CAIRNS FIRE HELMETS?

Due to the changes to the HPI and the Heat and Thermal Shrinkage Resistance Test, Cairns 360S and 360R Helmets will be equipped with an internal brimwire (similar to the Cairns 880 Traditional Helmet) to reduce the brim droop during prolonged heat exposure. Additionally, Bourke visors will be cut from materials with a higher heat resistance to reduce droop.

NOTE: Bourke visors are not NFPA-compliant primary eye protection.

Due to the changes to the HPI and the adoption of the ANSI/ISEA Z87.1-2010 standard, the shape of our 4" and 6" faceshields will change slightly so that, when deployed, the faceshields extend 10 mm above, behind and below the wearer's corneal plane. (See the "Annex D" illustration from the ANSI/ISEA Z87.1-2010 standard below.)

Annex D. Lateral (Side) Coverage Illustration (for Medium Headform)
(informative)



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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WHEN WILL THESE UPDATED PRODUCTS BE AVAILABLE FROM MSA?

As is our custom, we will inform you as each Cairns Fire Helmet model has been updated to meet this standard. In the mean time, if you have any questions about NFPA 1971:2013 or how it affects our products, please contact Customer Service at 1-877-672-3473.

Offices and representatives worldwide

For further information: