

High-Heat Hats and Caps Technical Bulletin

To meet the demands of high heat environments, Bullard produces hats and caps in technologically advanced thermoplastic materials.

Bullard's 911C and 911H shells are molded in the same grade of thermoplastic material that we use in the Wildfire helmets. There are also Wildfire versions, such as FH911C/FH911H. These helmets are certified to the NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting, 2011 Edition Wildland firefighting standard (the only difference between the 911C, 911H and FH911C, and FH911H is the addition of reflective markings and accessories specific to firefighting; the materials are the same).

The only high temperature tests applicable to hard hats in the US (beyond the 120°F requirement that applies to all hard hats) are the requirements of the NFPA 1977-2011 standard. The heat resistance test in the standard involves exposing the helmet to a temperature of 350°F for a period of 5 minutes; the standard also includes other tests such as shock and penetration resistance, radiant heat conditioned resistance, and flame resistance. Although only the FH variant of the 911C/911H series is certified to the NFPA standard (due to requirements for the special accessories mentioned above), the materials used in the 911C and 911H are the same, and their heat resistance characteristics are identical.

Unfortunately, most plastic materials soften gradually over a wide range of temperatures. Therefore, there is no specific temperature at which they change from "solid" to "liquid". As a result, there is no straightforward answer on the melting temperature of a given material.

Bullard's high heat thermoplastic caps are ideal for utilities, welding, foundries, and steel mills.

Contact Bullard Customer Service at 877-BULLARD (285-5273) for more information on all Bullard products.



