

Helmets for Structural Firefighting shall meet or exceed NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting 2007 Edition (Pertaining to Structural Fire Helmets). Certification/verification shall be furnished by written documentation supplied by a recognized independent third party test laboratory.

A sample helmet meeting the requirements of this specification shall be supplied upon request for inspection and verification of compliance within 10 working days.

The authority having jurisdiction reserves the right to accept bids submitted per their evaluation based upon compliance to the Standard performance and any other applicable requirements concerning fit and function.

The authority having jurisdiction reserves the right to accept the most appropriate helmet based on the above stated criteria without regard to lowest price offerings.

Successful bidders shall ship helmets per award from the manufacturer within 14 working days after receipt of order from the distributor.

General

Helmets conforming to this specification are designed to help protect the firefighter from head and neck injuries related to structural firefighting activities.

The helmet manufacturer's quality system shall be certified to the ISO 9001-2000 Standard to assure quality procedures and production capabilities.

Warranty

Bullard warrants to the original purchaser that the firefighter helmet and non-electronic components are free of defects in materials and workmanship under normal use and service for a period of five (5) years from the date of manufacture on the helmet shell and lifetime (as defined in NFPA 1851: 10 years) warranty on the non-electronic components.

Physical Configuration

The basic helmet shall be flared, rear-brim design with a length of 12-5/8", a width of 10" at the faceshield hardware and a height of 6-3/4".

Impact Management System

The impact management system of the helmet shall consist of an outer shell, a unitary inner shell and a crown strap suspension. These three components, working together as a system, reduce the force of an impact to the helmet and the helmet wearer.

Shell

The helmet shell shall be of contemporary style and shall be constructed of heat-resistant thermoplastic. Color pigment shall be added to the thermoplastic resin as part of the manufacturing process that molds the helmet to help maintain appearance by masking chips and scratches that might occur with daily wear and tear. The shell finish shall be available in white, yellow, red, black, blue, orange and lime-yellow.

The edge of the outer shell shall have aluminum reinforced, elastomeric edge beading that is secured at the rear of the brim by a stainless steel clip and D-ring fastened by a stainless steel rivet. The edge beading shall not melt, drip or ignite when tested to NFPA 1971-2007, Section 6-6.12, Heat Resistance requirements.

Unitary Inner Shell

The inner shell shall be of unitary design, incorporating impact attenuating structures and shall be constructed of a heat-resistant thermoplastic. No urethane or other foam shall be utilized.

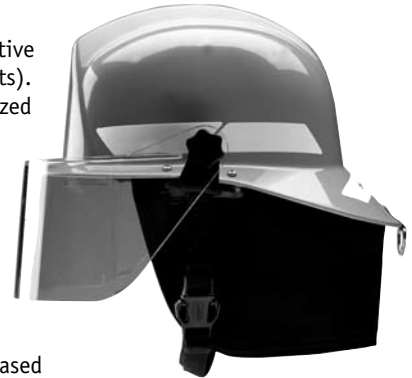
Crown Strap Suspension

The crown strap suspension shall consist of two 3/4" nylon woven straps attached to four nylon keys. The keys shall be inserted into key sockets formed into the unitary inner shell.

Ratchet Headband

The helmet shall have a quick-adjustment sizing capability by means of a ratchet adjustment mechanism attached to a heat-resistant nylon headband. The headband shall be attached to the unitary inner shell by four black acetate buttons (two front, two rear).

The ratchet housing shall be wrapped in a cushion-backed leather cover to enhance fit and comfort at the nape of the head. This leather ratchet cover shall be attached by four pieces of Velcro hook and loop material to permit removal for cleaning and replacement.





Brow Pad

The headband shall be supplied with a fire retardant (FR) cotton knit brow pad, backed with foam cushion padding material at the forehead. This brow pad shall extend rearward on each side 6.5" from the center line of the headband to provide stability and comfort to the firefighter. The brow pad shall be attached by a continuous strip of hook and loop material to permit removal for laundering and replacement. Attachment to the headband with stitching will not be permitted.

Chin Strap

The chin strap shall consist of two pieces of 3/4" black Nomex® webbing with a super-tough nylon quick-release buckle.

The male side of the quick-release buckle shall be anchored to the right side of the outer shell with a dielectric anchor block secured to the faceshield-mounting bracket with 2 stainless steel screws. The long portion of the chin strap with the female side of the quick-release shall be attached to the left side of the outer shell in the same manner.

When the chin strap is connected and fully extended, maximum length shall be at least 24" when measured from one anchor block to the opposite anchor block.

Ear/Neck Protector

The ear/neck protector shall consist of a 6 oz. rip-stop Nomex outer shell backed with two layers of FR cotton flannel for comfort and protection. A 1" strip of loop material shall be stitched in one continuous band across the top of the outer shell portion of the ear/neck protector for attachment to three corresponding strips of 1" hook material located on the interior of the unitary inner shell.

When properly attached to the unitary inner shell of the helmet, the ear/neck protector shall have the following minimum coverage to the sides and rear of the helmet brim:

- 6" from the sides of the helmet brim at the chinstrap.
- 6-1/2" from the center rear of the helmet brim.

Faceshield

The faceshield shall be a hard-coated high heat thermoplastic material 4" x 15" that is molded in the formed position and designed to fit the contour of the helmet brim. The faceshield shall be certified to meet the optic requirements of ANSI Z87.1-2003 Standard for Eye and Face Protection. This certification shall be in addition to compliance with NFPA 1971 requirements for heat and impact performance.

When mounted, the faceshield shall permit a minimum retractability of 90° in the stowed position.

The faceshield shall be mounted to the brim of the outer shell by a glass-reinforced, flame resistant, nylon handwheel/stainless steel threaded stud attached to a brass T-nut which is supported by an aluminum washer fastened to Quick-Attach mounting blades. The faceshield hardware shall be tested to NFPA 1971-2007, Section 6-3 Flame Resistance Test Two.

The chinstrap/Quick-Attach combination mounting bracket shall be secured to the brim of the outer shell by 4 stainless steel bolts and nuts. A thermoplastic spacer washer shall be used to bridge the mounting bracket.

Retro-reflective trim

The outer shell shall have 5 - 1" x 4" fluorescent lime-yellow, retro-reflective markings located around the circumference of the outer shell. The reflective materials shall be glass bead based to maximize the resistance to heat exposure experienced in firefighting. Vinyl based reflective materials will not be considered equal.