

Helmets for Structural Firefighting shall meet or exceed

- EN 443:2008, European standard on Helmets for structural Fire Fighting,
- EN 14458:2018, European standard on Face Eye Protection for the use of fire fighting

Certification/verification shall be furnished by written documentation supplied by a recognized independent third party test laboratory along with the quote.

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 of 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 shall be certified ISO 9001 company to assure quality procedures and production capabilities.

**Helmet Construction:
Physical Configuration**

The basic helmet shall be flared, rear-brim design with a length of 14", a width of 10" at the faceshield hardware and a height of 6-7/8".

Shell

The helmet shell shall be of contemporary style and shall be constructed of heat-resistant composite of long strand fiberglass with a thermoset resin. Color pigment shall be added to the resin as part of the manufacturing process that molds the helmet to help maintain appearance by masking chips and scratches that might occur in daily wear and tear. Matching flame resistant paint shall also be applied to the outer finish of the shell. The shell finish shall be available in white, yellow, red, black, orange and lime-yellow.

The edge of the outer shell shall have an 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 EN 443:2008

Impact Liner System

The impact liner shall consist of a urethane foam liner glued to a black inner shell with a heat deflection temperature >250° F @264 psi. The urethane foam liner shall be formed without the use of CFC's to eliminate the potential for additional expansion when subjected to heat during actual use.



The black inner shell shall have four 1" x 3" pieces of adhesive-backed Velcro® hook material attached, two to each side, to secure the ear/neck protector at the side of the inner shell.

Crown Strap Suspension System

The crown strap suspension system shall be three 3/4" nylon web straps attached to 6 nylon keys. The keys shall be locked into the lip of the inner shell against the urethane impact liner.

Ratchet Headband

The helmet shall have a quick-adjustment sizing capability by means of a ratchet adjustment system attached to a heat-resistant nylon headband. The headband shall be attached to the inner shell by four white buttons (two front, two rear). The headband shall have the ability to be raised or lowered inside of the inner shell by location points on the headband. This adjustment shall not affect the height of the helmet on the firefighter's head.

The ratchet portion of the headband shall have a ratchet height adjuster located at the rear of the headband, inside of the inner shell, to permit the ratchet to be positioned for comfort on the nape of the firefighters head. This ratchet height adjuster shall permit at least 1" of travel by means of three height adjustment slots for proper fit. This independent adjustment component shall have a 3/4" piece of adhesive-backed Velcro hook material attached at the center rear of this component to secure the rear portion of the ear/neck protector.

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 aramid flannel brow pad, backed with foam cushion padding material at the forehead. This brow pad shall be attached by 4 pieces of Velcro 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 nylon quick-release buckle and a rear strap (3-point attachment)

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 buckle 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 be made from Aramid with an inner liner.

A 1" strip of Velcro 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 the inner shell.

Optional: Dutch Ear-Neck-Protector made from aramid fiber with inner liner.

Weight with neck protector and visor approx. 1.620g

Faceshield

The faceshield shall be a hard-coated high heat thermoplastic material, 10 or 15 cm long, 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

- EN 14458:2018, European standard for Face and Eye protection for the use of fire fighting.

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 and mounting bracket. The mounting bracket shall be secured to the brim of the outer shell by the chin strap screws. A thermoplastic spacer washer shall be used to bridge the mounting bracket adjoining the edge beading.

Scotchlite Retro-reflective trim

The outer shell shall have 5 tetrahedron-shaped, 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.

Warranty:

The manufacturer shall warrant to the original purchaser that the entire helmet shall be free of defects in material and workmanship, under normal use and service, for a period of two years from the date of manufacturer.