

Helmets for Structural Firefighting shall meet or exceed NFPA 1971, *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*, 2013 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 9001-2008 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 1971-2013, 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.

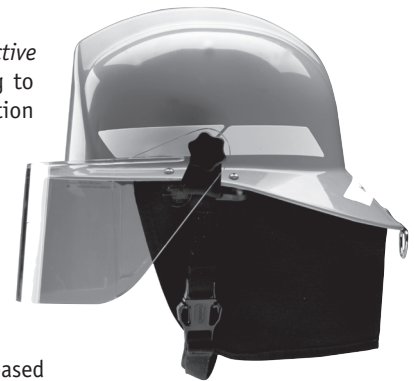
Crown Strap Suspension

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/ISEA Z87.1 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 1971-2013, 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.

Americas:
Bullard
1898 Safety Way
Cynthiana, KY 41031-9303 • USA
Toll-free within USA: 877-BULLARD (285-5273)
Tel: +1-859-234-6616
Fax: +1-859-234-8987

Europe:
Bullard GmbH
Lilienthalstrasse 12
53424 Remagen • Germany
Tel: +49-2642 999980
Fax: +49-2642 9999829

Asia-Pacific:
Bullard Asia Pacific Pte. Ltd.
LHK Building
701, Sims Drive, #04-03
Singapore 387383
Tel: +65-6745-0556
Fax: +65-6745-5176

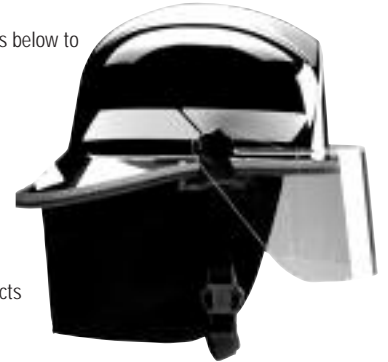


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Velcro is a registered trademark of Velcro USA.

Get a Custom Fit with the U-Fit System

Congratulations! Your helmet was designed with the U-Fit System, offering 12 custom comfort settings. Follow the instructions below to adjust the ride and balance of your helmet.

1. Try on your helmet and check the initial balance, fit and comfort by rotating your head.
2. Remove the Ear Neck Protector to better see how to adjust the back of the helmet.
3. Pop the gray colored "U Channel" (Figure 1) away from the black inner liner. There is one "U Channel" in the front of the helmet and one in the back of the helmet.
4. You can tailor the fit by adjusting the tabs, which control ride height, and posts, which control forward / backward / level balance.
5. Adjust the ride of your helmet. There are three tab positions on the "U Channel": A, B, and C. Each of the tab positions affects the location of the ratchet by approximately one inch. For the lowest "ride" on your head, position the tabs to "A". For a higher "ride", position the tabs to "B" or "C".
6. Adjust the balance of your helmet. There are two post positions, 1 and 2 on the gray "U Channel". Change the post position to adjust helmet balance.
7. Next, try the helmet back on your head to see if the adjustments to the back of the helmet were helpful. You may want to make another round of adjustments as described above to maximize the balance and fit.
Typically firefighters don't need to adjust the front of the helmet. If however, the adjustments to the rear of the helmet don't meet your needs, you can work on the front of the helmet by first removing the browpad. As with the back of the helmet, you can adjust the height and post position on the U Channel piece. Keep in mind that the front of the helmet is a key interface to the SCBA, and most people prefer position C.
8. Lastly, when finished your adjustments, re-install the Ear Neck Protector and Browpad, using your fingers to smooth the surfaces to avoid bunching.



To size the Sure-Lock® ratchet headband:

1. Turn the ratchet knob counterclockwise until headband is at largest size (Figure 2).
2. Place the helmet on your head and turn ratchet knob clockwise until headband is snug and comfortable.

To raise or lower faceshield:

1. Release tension knobs found on both sides of the helmet.
2. Tighten knobs once faceshield is in desired position.

NOTES

- Performance properties of NFPA 1971, 2007 cannot be tested by users in the field.
- NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program* requires members who engage in or are exposed to the hazards of structural firefighting shall be provided with and shall use, a protective ensemble that shall meet the applicable requirements of NFPA 1971, 2007 *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*.
- The protective ensemble must be used by members only under direct supervision of their fire department or employer in a manner consistent with OSHA 29 CFR 1910.132 *General Requirements of Subpart I, Personal Protective Equipment*.
- For information on NFPA 1951 Standard on Selection, Care and Maintenance, and basic cleaning and inspection guidelines, visit www.bullard.com/trainonline.

WARNING

Read all instructions and warnings before wearing this helmet. Only the end user may separate this manual from the element. Manual must be removed prior to putting the helmet into service. After removal from the wearer, the helmet should be inspected for damage and soiling after each use. The helmet should be adjusted by means of the adjustment points provided to permit a proper fit that does not interfere with the SCBA while in use. These adjustments should be done prior to actual structural fire fighting activities. Helmets damaged or deteriorated beyond economical repair should be removed from service. Failure to follow these instructions may cause death or serious injury.

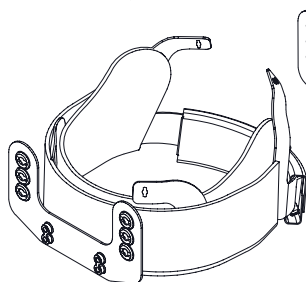


Figure 1

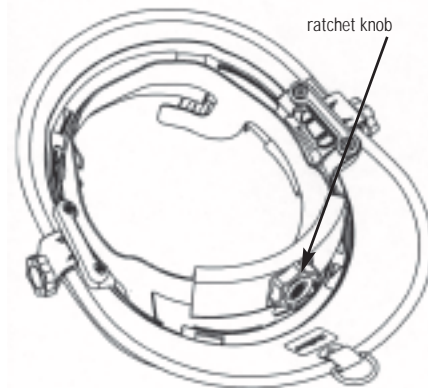
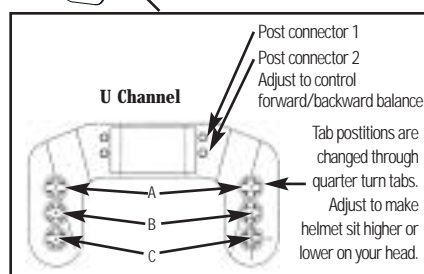
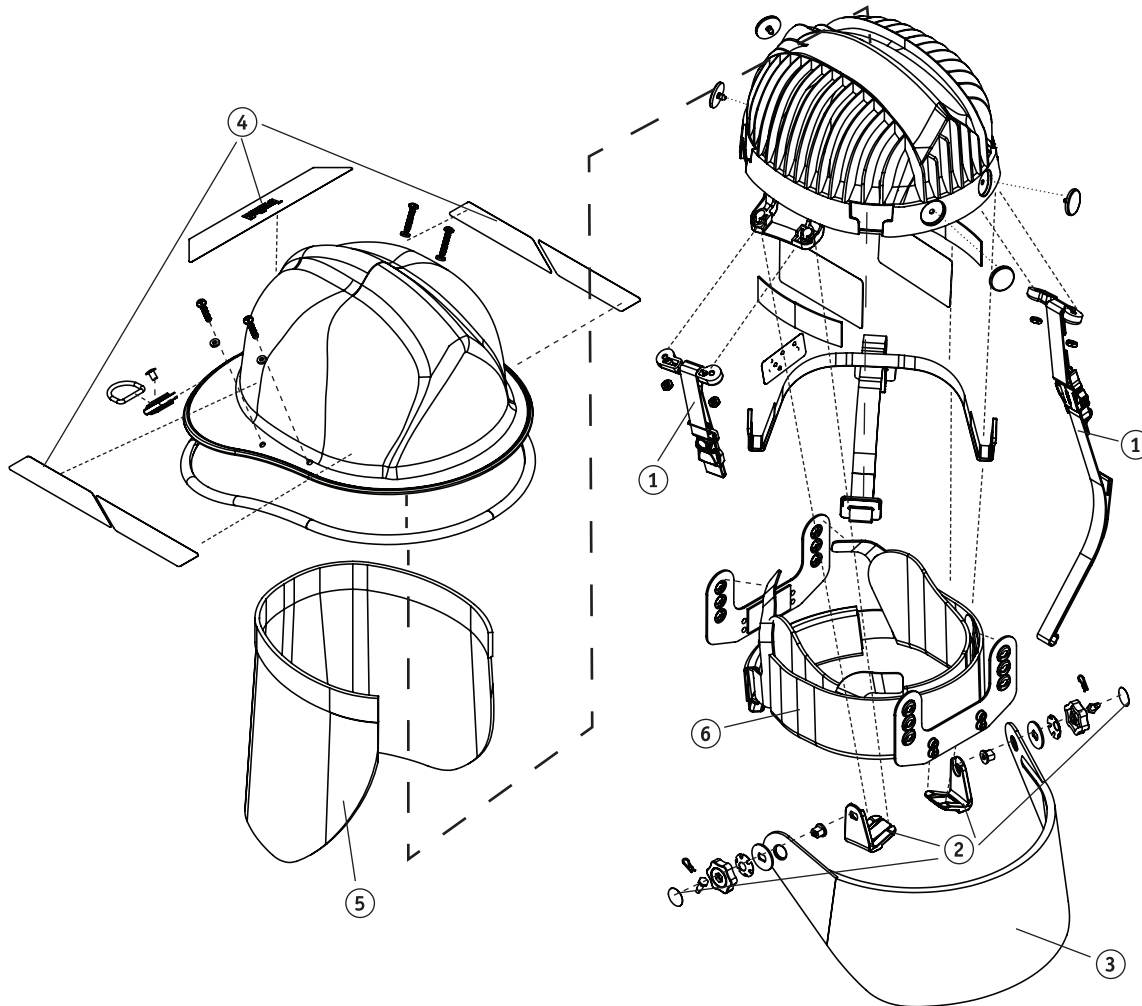


Figure 2

Replacement Parts for LT Series Helmets



- ① R141 Nomex® chinstrap with quick-release buckle and postman's slide fastener
- ② R154 Quick-Attach Faceshield mounting hardware kit
- ③ R330 4" hard-coated PPC faceshield for FX and PX
- ④ R533 Retro-reflective fluorescent, adhesive backed Scotchlite® strips, 1" x 4": Lime-Yellow (set of 5)
- ⑤ R721 Rip-stop Nomex ear/neck protector
- ⑥ R624 Standard headband with brow pad
- ⑦ R929 Replacement inner crown system. Includes inner impact shell, Sure-Lock® ratchet headband, brow pad, 6-point nylon crown strap assembly, Velcro strips, and black suspension ring

Helmet Models

- LTX Contemporary style thermoplastic structural fire helmet with Quick-Attach™ faceshield
 - LTG4X Contemporary style thermoplastic structural fire helmet with Quick-Attach goggle
- Colors: LT series helmets are available in seven standard colors: Black, White, Red, Yellow, Lime-Yellow, Blue and Orange.

Pre-Use Information

Marking Recommendation and Restrictions:

Use only accessory equipment of the type included in the original helmet or approved by Bullard. Using unauthorized accessories may dramatically change the performance of the helmet.

All helmet markings (e.g. front identification shields, title tapes, decals, retro-reflective trim, etc.) must either be supplied by a Bullard authorized fire service distributor or authorized for use in writing by Bullard.

All helmet accessories (e.g. flashlight brackets, communications head sets, etc.) must be either supplied by a Bullard authorized fire service distributor or authorized for use in writing by Bullard.

Cleaning

Remove ear/neck protector, and headband. Clean inner and outer shells with mild soap or detergent. Wash the ear/neck protector, headband, and brow pad in warm, soapy water and air dry at room temperature. Clean faceshields with mild detergent, rinse thoroughly with clean water, and dry with a soft cloth.

Users should not wear helmets that are not thoroughly cleaned and dried.

Contamination and Decontamination:

Special precautions must be taken if your protective helmet becomes contaminated with chemical or biological hazardous materials. The guidance for these precautions should be coordinated with the appropriate (local, state, and federal) authorities having jurisdiction for hazardous materials (HAZMAT).

Contaminated helmet ensembles should be isolated, contaminate(s) identified, and bodily contact should be avoided. Avoid spreading the contamination to interior spaces of buildings or vehicles, any living quarters, or personal belongings. If possible, seal the contaminated ensemble in a leak proof, sealable, air tight container. Disposal should be done in adherence to local, state, and federal laws. If the helmet is to be reused, it MUST be decontaminated before reuse. Decontamination should be performed using procedures established by decontamination professionals that will remove contaminate(s) while minimizing damage or compromise to the helmet. Failure to do so could result in increased risk of injury, illness, disease, or death.

▲ WARNING

Users should not wear helmets that are not thoroughly cleaned and dried. Failure to follow this instruction could result in death or serious injury.

Two-Year Limited Warranty

Bullard warrants to the original purchaser that the firefighter helmet is free of defects in materials and workmanship under normal use and service for a period of two (2) years from the date of manufacture. The Bullard obligation under this warranty is limited to repairing or replacing articles that are returned within the warranty period, shown to be defective after inspection by Bullard, and subject to the following limitations:

- Helmet must be returned to Bullard with shipping charges prepaid
- Helmet must not be altered from its original factory configuration
- Helmet must not have been misused, subjected to negligence or damaged in transport

In no event shall Bullard be responsible for damages, loss of use, or other indirect, incidental, consequential or special costs, expenses or damages incurred by the purchaser, notwithstanding that Bullard has been advised of the possibility of such damages.

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO TWO (2) YEARS FROM THE DATE OF MANUFACTURE OF THIS PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

RETURN AUTHORIZATIONS: Contact Bullard Sales Support to obtain written permission to return any product. Material returned for credit will be subject to factory inspection. Current products or products under warranty will be subject to a rehandling charge less original freight charge. Obsolete or special order products cannot be returned without written permission.



⚠ WARNING

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS FIREFIGHTER HELMET.

Firedome helmets are constructed with high quality materials and workmanship. They are engineered to provide limited protection against head injuries, when properly adjusted for fit and when worn by firefighters during normal fire fighting activities. They are not designed for direct contact with flames or molten metal, or for protection against hazardous chemicals, biological, or radiological agents. Contact of these fire helmets with live wires should be avoided. NEVER ALTER OR MODIFY the helmet's design or construction without explicit written instructions from Bullard. Inspect your helmet and suspension system regularly, regardless of how often it is used. If you notice any sign of wear, damage, abuse, or environmental degradation, replace the shell and/or suspension immediately. If the helmet has sustained a forcible blow (impact), it must be replaced, even if there is no visible damage.

THIS HELMET MUST BE PROPERLY ADJUSTED AND SECURED TO THE HEAD WITH ALL COMPONENTS IN PLACE, USED AS SPECIFIED IN MANUFACTURER'S INSTRUCTIONS.

Do not modify or replace any component of this helmet, including the shell, energy-absorbing system, retention system, fluorescent retro-reflective markings, ear covers, or faceshield with components or accessories other than those certified for use with this product. Modification or replacement with other than Bullard parts voids compliance with NFPA 1971, 2007.

NO PROTECTIVE HEADGEAR CAN PROTECT AGAINST ALL FORESEEABLE IMPACTS. For maximum protection under these standards, the helmet must be of good fit and all retention straps must be securely fastened. Use only with a Bullard suspension system. This helmet should be inspected by the user for visible damage prior to each use. Immediately replace shell or suspension at first sign of wear, damage, or degradation.

HELMETS CAN BE SERIOUSLY DAMAGED BY SOME COMMON SUBSTANCES, THOUGH SHOW NO DAMAGE TO THE NAKED EYE. CLEAN ONLY WITH MILD DETERGENT AND WATER. DO NOT USE OR EXPOSE HELMET TO PAINTS, SOLVENTS, CHEMICALS, ADHESIVES, GASOLINE, OR LIKE SUBSTANCES. STORE IN A DRY, COOL PLACE, AWAY FROM DIRECT SUNLIGHT.

Failure to follow these instructions and avoid potentially hazardous situations could result in death or serious injury.

Firedome helmet model LT meets or exceeds all performance specifications under NFPA 1971, 2007.

For information on replacement parts or other accessories, please visit www.bullard.com or contact your local distributor or Bullard at 877-BULLARD.



Americas:
E.D. Bullard Company
1898 Safety Way • Cynthia, KY 41031-9303
Toll free: 877-BULLARD (285-5273)
Tel: 859-234-6616 • Fax: 859-234-8987
www.bullard.com

Europe:
Bullard GmbH
Lilienthalstrasse 12
53424 Remagen • Germany
Tel: +49-2642 999980 • Fax: +49-2642 9999829
www.bullardextrem.com

Asia-Pacific:
Bullard Asia Pacific Pte. Ltd.
LHK Building
701, Sims Drive, #04-03 • Singapore 387383
Tel: +65-6745-0556 • Fax: +65-6745-5
www.bullard.com



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