TECHNICAL SPECIFICATIONS
THOROGOOD RUBBER PROTECTIVE FOOTWEAR
807-6003/507-6003 STRUCTURAL FIRE FIGHTING
BUNKER BOOT, FELT LINING

1 Scope – This specification will outline the requirements for bunker style, rubber structural fire fighting safety footwear with felt lining and a lug sole.

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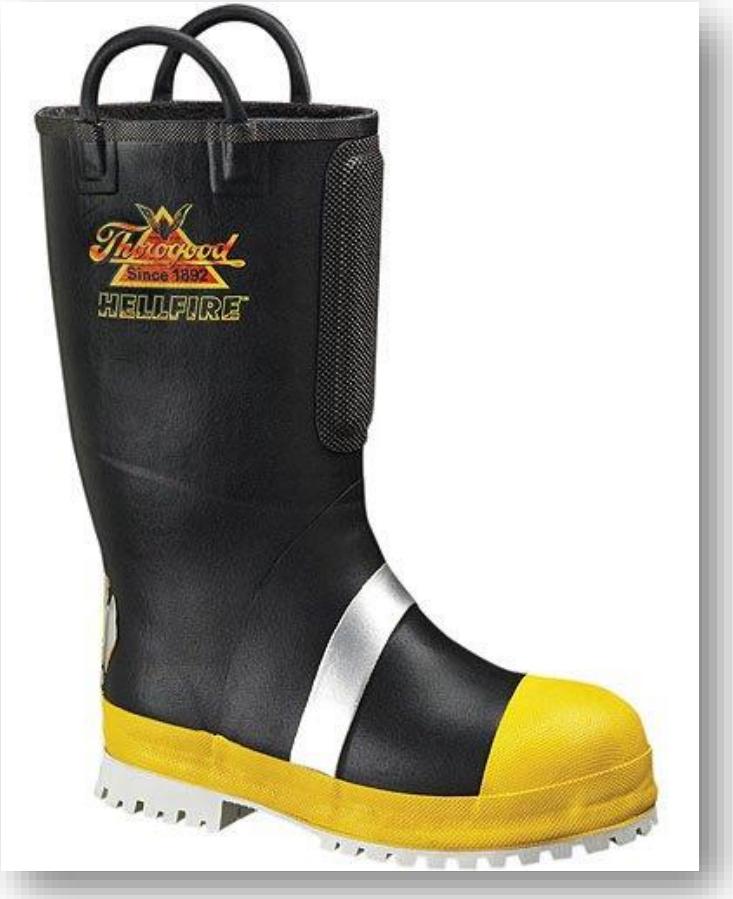
2.2 This specification meets or exceeds the requirements of NFPA 1971-2013 Standard on Protective Ensemble for Structural Fire Fighting 2007 Edition; NFPA 1992-2012 Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies; NFPA 1500, Fire Department Occupational Safety and Health Program; and ASTM F 2413-11 M I/75 C/75 PR EH.



3 Quality Assurance – Quality Assurance is designed to meet the following requirements.

2.1 NFPA 1971-2013 Edition, NFPA 1992-2012 Edition

2.2 ISO 9001-2008 Registered (International Standard/ISO 9000,

2.3 Quality Systems Specification for Design, Development, Production, Installation and Servicing).

2.4 UL® (Underwriters Laboratories, Inc.) certified.

3 Description

3.1 Design – This footwear is designed for structural fire fighters, providing ultimate protection to the foot and lower leg region through a single piece felt lining. Superior foot comfort and protection has been added by design with a removable thick cushion insert.

3.2 Construction – Vulcanized rubber, black color with heat resistant high visibility reflective and yellow trim, bunker style, 13" internal height (15" external), on a men's size 11 M, when measured according to NFPA 1971-2013 Edition, incorporating pull loops vulcanized to the top of the boot using a double reinforced

3.3 attachment for bond security. The fire fighter will experience less calf muscle and skin irritation because of the unique flat tacked loop attachment method on this boot.Sizes and Widths – Footwear is available in all of the following sizes.
Men's: 5–16 including half sizes and three widths: Medium, Wide and Extra Wide.
Women's: 5-10, including half sizes, and three widths: Narrow, Medium and Wide.

3.4 Upper Construction (including trim) – Proprietary formula upper rubber is flame-suppressant and ozone resistant, and is bonded to rubber-coated cotton knit fabric, which is bonded to rubber coated 3.5 mm needled polyester felt lining (in the leg, ankle, and heel areas). Stitching thread on the back seam of the sock is

3.5 DuPont Kevlar ®. Forefoot area is entirely surrounded by flame suppressant and ozone resistant rubber, rubber coated

3.6 Cotton knit fabric, PU foam insulation, and additional rubber coated fabric. The upper exceeds flame resistance, puncture resistance, heat penetration resistance, and flex resistance and liquid and blood borne pathogen resistance requirements of NFPA 1971-2013 Edition.

3.7 Sole Construction - White lug rubber outsole, traction lug pattern. Proprietary formula rubber is flame suppressant, slip resistant, and abrasion resistant. Midsole construction incorporates 9 mm polyester felt insulation (needled felt for high tenacity) with additional rubber sponge insulation and padding. The sole exceeds flame resistance, puncture resistance, heat penetration resistance, abrasion

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3.9 resistance, flex resistance, slip resistance, and liquid and blood borne pathogen resistance requirements of NFPA 1971-2013 Edition.

3.10 Shank – Three ribbed hardened steel ladder shank will not deflect more than 0.25 inches at 400 lbs. when tested according to NFPA 1971-2013, and meets corrosion resistance requirement of NFPA 1971-2013 Edition.

3.11 Sole Plate – Stainless steel puncture resistant, exceeds ASTM F 2413-11 PR, meets NFPA 1971-2013 requirement for corrosion resistance. Sole plate is placed on the inside of the outsole to keep punctures from allowing migration of liquid contaminants into the felt midsole and keeps any electrical hazard as far away from the fire fighter as possible.

3.12 Safety Box Toe – Oversized steel safety box toe, ASTM F 2413-11 M I/75 C/75 rated, meets NFPA 1971-2013 requirement for corrosion resistance. Oversized steel toe allows for PU foam

3.13 insulation to be placed on the outside and PU foam insulation on the inside of the steel to protect the fire fighter against extreme heat/cold conditions.

3.14 Shin Guard – Flame suppressant rubber with slip resistant heavy knurled pattern, covering sponge rubber padding. This allows for greater shin protection for the fire fighter.

3.15 Counter – Vulcanized rubber counter for heel stability in all types of terrain.

3.16 Insole – Thick removable, shock absorbing PU closed cell molded foam, with durable Superknit covering to cushion the foot and reduce fatigue.

3 Completed Bunker Boot, NFPA Compliant Test Specs

3.17 Heat and Thermal Shrinkage – Will remain functional without any separation, melting or ignition of any components when placed in a 500 degrees F (260 degrees C) oven for 5 minutes.

3.18 Radiant Heat Resistance – Vamps and quarters maintain an internal temperature of less than 111 degrees F (44 degrees C) when exposed to emittant radiant heat of 1340 degrees F (500 degrees C) maintained for 30 seconds.

3.19 Conductive Heat Resistance – Remains below 111 degrees F (44 degrees C) when filled with 10 lbs. of steel balls, placed on an iron plate 1 x 6 x 18 inches heated to 932 degrees F (500 degrees C) maintained for 30 seconds.

3.20 Liquid Penetration Resistance – In accordance with NFPA 1971-2013, no leakage for 1 hour to upper, vamp, and sole surfaces subjected to: AFFF (aqueous film forming foam for electrical grounding); battery acid (37% sulfuric acid); fire resistant hydraulic fluid (phosphate ester base); surrogate gasoline fuel C (50/50 toluene and iso-octane); and swimming pool

3.21 chlorinating chemical (at least 65% chlorine). In addition, in accordance with NFPA 1992-2012, no leakage for 1 hour to upper, vamp, and sole surfaces subjected to: acetone; ethyl acetate; 50% w/w sodium hydroxide; 93.1% w/w sulfuric acid; toluene; dimethyl formamide; and nitrobenzene.

3.22 Liquid Integrity Test – Remains dry to 100,000 flexes in water to within 1 inch of highest entry point, after heat and thermal shrinkage test.

3.23 Electrical Hazard – Meets or exceeds ASTM F 2413-11 EH.

3.24 Electrical Insulation Test – Current leakage less than or equal to 1.0 milliampheres when filled to 30 mm with BBs and placed in water to just short of the upper, and 18,000 volts are applied.

4 Use and Care

4.1 Follow the guidelines and instructions in the "Thorogood Protective Footwear for Structural Fire Fighting" hang tag attached to the boots.

5 Warranty

5.1 This boot shall be warranted against manufactures defects for the period of one year from the date of purchase and the sole wear shall be warranted against cracking for the period of eighteen months from the date of purchase. Normal sole wear is not considered defective. Individual purchasing or being issued this boot must activate the warranty through weinbrennerusa.com/warranty or call 1-800-826-0002.