

**BID SUBMISSION FORM**  
**ITB # 269-2013-080**  
**MISCELLANEOUS FIRE EQUIPMENT (BOOTS, HELMETS, AND HOSES)**

This Bid is submitted by:

Company Name: Newton's Fire & Safety Equipment, Inc.

Representative (printed): Darrell Newton

Representative (*signed*): \_\_\_\_\_

Address: 2724 Darrell Newton Drive

City/State/Zip: Swepsonville, NC 27359

Telephone: (336) 578-3931  
(Area Code) Telephone Number

Facsimile: (336) 578-1982  
(Area Code) Fax Number

E-Mail Address: darrell@newtonsfire.com

It is understood by the Bidder that the City reserves the right to reject any and all Bids, to make awards by line item, combination of items, grand total on a state, regional, or national basis according to the best interest of the CLT and CCPA, to waive formalities, technicalities, to recover and re-bid this ITB. Bids are valid for one hundred twenty (120) calendar days from Bid Opening.

Newton's Fire & Safety Equipment, Inc. May 28, 2013  
Company Name Date

Darrell Newton Darrell Newton  
Authorized Signature Please type or print name

**Addenda Acknowledgement Form**  
**ITB # 269-2013-080**

**MISCELLANEOUS FIRE EQUIPMENT (BOOTS, HELMETS, AND HOSES)**

1. **Bid/Bid Submission Check List:** Confirm by placing a check mark in the space provided that as the bidder or proposer the information listed below has been reviewed and complied with in the submission of a response to this Invitation to Bid/Request for Bids.

(A)  Addenda acknowledgement. Please contact the Procurement Management Division representative to verify the number of addenda issued.

<i>Procurement Management Rep. Name</i>	<i>Telephone Number</i>
Genetta Carothers	704-336-5195

**Addenda Receipt: The following confirms receipt of any and all addenda issued for this Invitation to Bid/Request for Bids:**

Addendum #	Date Issued
<u>1</u>	<u>5-15-2013</u>
<u>2</u>	<u>5-15-2013</u>
<u>3</u>	<u>5-28-2013</u>

(B)  Bid/Bid document has been signed by authorized bidder/proposer official.

(C)  Bid/Bid package has been properly labeled per the instructions. (See Section 1.8, page 4)

(D)  Bid/Bid Response Package Forms

- Bid Submission Form One
- Addenda Acknowledgement Form Two
- Pricing Sheet Form Three
- Non-Discrimination Certification Form Four
- CCPA Plan, **Section 4.1** – Attachment 1
- Vendor References – Attachment 2
- Specification Compliance Pages 31-34

2. **Exceptions:** The undersigned Bidder agrees to provide all Products and Services requested in the ITB for the price(s) set forth in the Pricing Sheet, all in strict conformance with the terms, conditions and specifications set forth in the ITB (including any addenda or amendments), subject only to the exceptions stated in the chart below. Exceptions representing material changes to Bid terms are grounds for rejection of the Bidder's Bid.

ITB Section Number	ITB Section Title	Exception and Proposed Change to ITB

The signature below certifies that: (a) the Bidder's Bid complies with the requirements of this Invitation to Bid; (b) that items 1(A) through 1(D) of the above checklist have been verified as complete, and (c) that the Bidder takes no exception to the terms of the ITB other than those listed in the chart contained in this Form.

Date: May 28, 2013

Bidder: Newton's Fire & Safety Equipment, Inc.  
Print name of Bidder

By: Darrell Newton, President  
Print name and title of signatory

Signature: *Darrell Newton*

**PRICING SHEET**  
**ITB # 269-2013-080**  
**MISCELLANEOUS FIRE EQUIPMENT (BOOTS, HELMETS, AND HOSES)**

The undersigned proposes to furnish the following items in strict conformance to the bid specifications and bid invitation issued by the City of Charlotte for this bid. Any exceptions are clearly marked in the attached copy of bid specifications.

**BIDS ARE DUE NO LATER THAN 3:00 P.M. EDT, MAY 30, 2013**

Description	Brand Name / Part Number	Bidder Part Number	Proposed Brand Name / Part Number	UOM	Est Qty	Unit Cost	Extended Cost
Leather Structural Firefighting Helmet	Houston / N6A No Substitute	B-LTH-1XX411221	N/A	EA	100	516.98	51,698.00
Fiberglass Composite Structural Firefighting Helmet	1010 No Substitute	C-TRD-1X1213221	N/A	EA	20	212.56	4,251.20
5" Large Diameter Supply Line – Hydro Flow LDH	FireQuip / HS50YD	HS50YD		100' sections	315	589.23	185,607.45
5" Large Diameter Supply Line – Hydro Flow LDH	FireQuip / HS50OD	HS50OD		100' sections	315	589.23	185,607.45
1 ¾" Attack Line – Victory Supreme Double Jacket 800	FireQuip / CS17RB	VS17RB		50" sections	500	124.93	62,465.00
1 ¾" Attack Line – Victory Supreme Double Jacket 800	FireQuip / CS17OB	VS17OB		50" sections	500	124.93	62,465.00
2 ½" Attack Line – Double Jacket 800	FireQuip / DJ25RB	DJ25RB		50' sections	380	122.83	46,675.40
2 ½" Attack Line – Double Jacket 800	FireQuip / DJ25OB	DJ25OB		50' sections	380	122.83	46,675.40
Wildland Forestry Hose Single Jacket TPU Lined	FireQuip / UF10GD	FH10GD		100' sections	400	1.15	460.00
Wildland Forestry Hose Single Jacket TPU Lined	FireQuip / UF10GB	FH10GB		100' sections	400	1.29	516.00
14" Pull-On Leather Boots	Crossfire / 301-400	—	—	Pair	100	NO BID	
<b>TOTAL:</b>							<b>\$646,420.90</b>

**Section 6**  
**Required Forms**  
**Form Three (Revised 5-15-13)**

**Total Bid Price must include all equipment, labor, delivery, installation, consultation, vendor profit and all other costs associated with this project. No additional cost will be allowed.**

**Administrative Fees:** Per **Section 3.13**, the Service Provider shall pay the City of Charlotte ("CLT") an **administrative fee of 1%** (minimum of 1%) based on all CLT/Participating Public Agency sales volumes within 30 days of the end of each calendar quarter set forth in the subsequent Contract. **It is the responsibility of the bidder to set the Administrative Fee.**

**Pricing:** Per **Section 4.7**, Bidders will provide percentage discount of <sup>VARIATION</sup>     % from the retail, catalog, or manufacturer price included in the see Attachment 3 (objectively verifiable index) minus discount.

**Pricing Incentives and Rebates:** Per **Section 4.7**, identify any incentives and rebates offered based on volume, electronic ordering or other criteria:

Reference the Charlotte Cooperative Purchasing Alliance (CCPA) website at <http://www.charlottealliance.org/>

The City reserves the right to award multiple Contracts by line item, combination of items, grand total on a state, regional, or national basis for the Products and Services required by this ITB if the CLT deems multiple Contracts to be in the City's and other Participating Public Agencies best interest.

Payment Terms: NET 30 DAYS

The undersigned hereby certifies the Bidder has read the terms of this bid document, including the sample contract (**Section 7**) and is authorized to bind the firm to the information herein set forth.

Date: MAY 28, 2013

NEWTON'S FIRE & SAFETY EQUIPMENT, INC.  
Legal Name of Firm

By: Darrell Newton

DARRELL NEWTON, PRESIDENT  
Name and Title of Person Signing (please print)



**NEWTON'S**  
FIRE & SAFETY EQUIPMENT, INC.

P.O. Box 13  
2724 Darrell Newton Drive  
Swepsonville, NC 27359

800.672.5918  
336.578.3931  
FAX 336.578.1982

**Attachment 3**  
**PRICE ADJUSTMENT FORMULAS**

<b>Description</b>	<b>Brand Name/ Part Number</b>	<b>Bidder Part Number</b>	<b>UOM</b>	<b>Price Adjustment Formula</b>
Leather Structural Firefighting Helmet	Cairns Sam Houston / N6A	B-LTH-1XX411221	EA	Price adjustment included as part of the bid in accordance with <b>Section 3.1. 48.5%</b> discount from the price included in " <b>Cairns Leather Helmets Ordering Selection Matrix and Price List</b> " published in the "Cairns Fire & Rescue Helmet Catalog" (most current edition)
Fiberglass Composite Structural Firefighting Helmet	Cairns 1010	C-TRD-1X1213221	EA	Price adjustment included as part of the bid in accordance with <b>Section 3.1. 43.75%</b> discount from the price included in " <b>Cairns Traditional Helmets Ordering Selection Matrix and Price List</b> " published in the "Cairns Fire & Rescue Helmet Catalog" (most current edition)
Fire Hose	Firequip	(all models/part numbers)		Price adjustment not included as part of the bid. <b>Fixed Unit Price</b> ; any potential price adjustments following the initial 24-month term of the contract will be sought in accordance with <b>Section 3.2.</b>

**NON-DISCRIMINATION PROVISION  
FOR ALL CITY CONTRACTS**

**Project:** MISCELLANEOUS FIRE EQUIPMENT (BOOTS, HELMETS, AND HOSES)

All requests for bids or Bids issued for City contracts shall include a certification to be completed by the Bidder or Proposer in substantially the following form:

The undersigned Bidder or Proposer hereby certifies and agrees that the following information is correct:

1. In preparing it's the enclosed bid or Bid, the Bidder or Proposer has considered all bids and Bids submitted from qualified, potential subcontractors and suppliers, and has not engaged in discrimination as defined in **Section 2**.
2. For purposes of this section, discrimination means discrimination in the solicitation, selection, or treatment of any subcontractor, vendor, supplier or commercial customer on the basis of race, ethnicity, gender, age, religion, national origin, disability or any otherwise unlawful form of discrimination. Without limiting the foregoing, discrimination also includes retaliating against any person or other entity for reporting any incident of discrimination.
3. Without limiting any other remedies that the City may have for a false certification, it is understood and agreed that, if this certification is false, such false certification will constitute grounds for the City to reject the bid or Bid submitted with this certification, and terminate any contract awarded based on such bid or Bid It shall also constitute a violation of the City's Commercial Non-Discrimination Ordinance and shall subject the Bidder or Proposer to any remedies allowed thereunder, including possible disqualification from participating in City contracts or bid processes for up to two years.
4. As a condition of contracting with the City, the Bidder or Proposer agrees to promptly provide to the City all information and documentation that may be requested by the City from time to time regarding the solicitation and selection of suppliers and subcontractors in connection with this solicitation process. Failure to maintain or failure to provide such information shall constitute grounds for the City to reject the bid or Bid and to any contract awarded on such bid or Bid. It shall also constitute a violation of the City's Commercial Non-Discrimination Ordinance, and shall subject the Bidder or Proposer to any remedies that are allowed thereunder.
5. As part of its bid or Bid, the Bidder or Proposer shall provide to the City a list of all instances within the past ten years where a complaint was filed or pending against Bidder or Proposer in a legal or administrative proceeding alleging that Bidder or Proposer discriminated against its subcontractors, vendors, suppliers, or commercial customers, and a description of the status or resolution of that complaint, including any remedial action taken.
6. As a condition of submitting a bid or Bid to the City, the Bidder or Proposer agrees to comply with the City's Commercial Non-Discrimination Policy as described in **Section 2**, Article V of the Charlotte City Code, and consents to be bound by the award of any arbitration conducted thereunder.

NAME OF COMPANY: Newton's Fire & Safety Equipment, Inc.

BY: Darrell Newton TITLE: President

SIGNATURE OF AUTHORIZED OFFICIAL: *Darrell Newton*

DATE: May 28, 2013



## **Attachment 1**

### **CCPA PLAN, SECTION 4.1**

In response to ITB 269-2013-080 sections 4.1.1, 4.1.2, and 4.1.3 we have included our response below.

**4.1.1** *Bids must include in detail how the Bidder plans to service all Participating Agencies as it relates to the CCPA.*

**4.1.1.1** *Ability to provide Products/services to any Participating Public Agencies in the contiguous 48 states; and the ability to deliver Products/Services in Alaska and Hawaii*

Newton's Fire & Safety is authorized to distribute the products/services specified in the bid in the contiguous 48 states (including Alaska and Hawaii).

**4.1.1.2** *Address if the Bidder has a national sales force, dealer network or distributor with the ability to serve Participating Public Agencies in all 50 U.S. States.*

Newton's Fire & Safety does not have a national sales force or dealer network. Our sales force is limited to North and South Carolina however the products/services included as part of this bid may be delivered to Participating Public Agencies in all 50 U.S. States.

**4.1.2** *Bids must include in detail how the Bidder will monitor and report all spend by CLT/Participating Public Agencies to the CLT for auditing purposes.*

Newton's Fire & Safety will be able to track and monitor sales contracts issued in connection with ITB # 269-2013-080 through our accounting software, Traverse. This software allows us to mark sales orders with corresponding contract numbers or purchase orders furthering allowing us to track orders by a specific contract. We will provide a quarterly report to the CCPA summarizing completed sales orders associated with any contract awarded in connection to ITB # 269-2013-080.

**4.1.3** *The city of Charlotte will post all awarded contracts on the CCPA website, along with the respective vendor information.*

**4.1.3.1** *Indicate if the Bidder will allow the City to utilize their organization's logo on the CCPA website*

Newton's Fire & Safety authorizes the City to utilize it's logo on the CCPA website.

**4.1.3.2** *Address if the Bidder will advertise the CCPA logo and website on their organization's website:*

Newton's Fire & Safety currently has no intention to advertise the CCPA logo and website on our company website.





**NEWTON'S**  
FIRE & SAFETY EQUIPMENT, INC.

P.O. Box 13  
2724 Darrell Newton Drive  
Swepsonville, NC 27359

800.672.5918  
336.578.3931  
FAX 336.578.1982

---

4.1.3.3 *Bids must include in detail how the Bidder plans to market the Contract(s) as a result of this ITB.*

Newton's Fire & Safety will market any contract(s) resulting from this ITB directly through it's sales force. All sales personnel will receive notification of awarded contracts along with information on how they can market the included products/services to potential Participating Public Agencies in their respective territories.

Should you have any further questions or need anything further please do not hesitate to contact us.

## REFERENCES

Company Name: Newton's Fire & Safety Equipment, Inc.

List three (3) clients excluding the City of Charlotte, for whom you have provided services similar to those outlined in this Invitation to Bid, for reference check:

NAME OF FIRM: Columbia Fire Dept.

ADDRESS OF FIRM: 1800 Laurel St.  
Columbia, SC 29201

CONTACT PERSON: Harry Tinsley

TELEPHONE NUMBER: (803) 315-1790

FAX NUMBER:

NAME OF FIRM:

Raleigh Fire Dept.

ADDRESS OF FIRM: 4120A New Bern Ave  
Raleigh, NC 27610

CONTACT PERSON: Rob Horton

TELEPHONE NUMBER: (919) 996-5981

FAX NUMBER:

NAME OF FIRM:

Fayetteville Fire Dept.

ADDRESS OF FIRM: 607 Person St  
Fayetteville, NC 28301

CONTACT PERSON: Kenneth Hall

TELEPHONE NUMBER: (910) 433-1788

FAX NUMBER:

### 4.20 Product Specifications:

4.20.1 **Firefighting Helmets:** Structural Firefighting helmets will be manufactured in accordance with NFPA 1971-2007 and OSHA specifications designed to mitigate adverse environmental effects to the firefighters head while working in an IDLH situation.

#### 4.20.1.1 **Leather Structural Firefighting Helmet**

- Cairns N6A Houston leather firefighting helmet with engineer thermal impact liner meeting NFPA 1971 and OSHA (CFR 1920) NBSIR 1977.
- The leather will be 11-13 oz. Tanned, top grain domestic cow hide, treated with strengthening hardeners.
- A four piece leather crown shell with rib type reinforcement offered in a medium (6-3/8 to 7-1/2) and large (7-5/8 to 8-3/8) size.
- A one piece leather brim that is shorter in the front and long in the back.
- Stitching to be 4 cord mercerized cotton thread in #8-10 gauge with 10-8 stitches per inch.
- The helmet shell be completely coated with high gloss, high heat, chemical and abrasion resistant, flame-retardant finish coating of color pigmented paint and clear lacquer. Colors offered will be black and white.
- A helmet hanger "D ring of 3/4 inch plated nickel will be riveted to the rear center brim.
- A brass carved eagle crown piece will be attached to the front main rib of the shell positioned to support a standard 6 inch fire department shield. In addition, 2 additional threaded studs with acorn nuts will be provided on the front of the shell to provide for positioning and attachment of the standard 6 inch fire department identification shield.
- The impact liner, a ridged cell, high temperature urethane foam cap covered with lexan and attached to a thermoplastic inner liner will be attached to the inter helmet shell.
- A 6 point attachment head suspension assembly made of 3/4 inch wide nylon straps will be attached to the impact liner at the base.
- The shell liner shall be of one piece construction made of cotton sateen with goat leather fore head piece.
- The helmet will have an adjustable head band that can be adjusted by 1/8 inch increments using a ratchet system.
- Ear and neck protection will be provided by a 4.5 oz. Nomex outer liner sewn to a black flannel inner liner, 19 inches long by 6.5 inch wide ear flap attached to the impact liner at the brass ring.
- The helmet will have standard lime yellow reflective trim around the exterior crown.
- The chinstrap, consisting of 3 pieces, will be made from Nomex webbing, 3/4 inch wide, with a one hand high-temperature, super tough, quick release buckle on one side and a die cast postman's slide buckle on the other. Overall length will not be less than 35 inches.
- Goggles will be made of non-corroding, high temperature, flame and impact-resistant material. With optically correct, minimal thickness

lenses.

### 4.20.1.2 **Fiberglass Composite Structural Firefighting Helmet**

- The Cairns 1010 helmet will be of a Traditional American Fire Service style, with a 4 rib crown and a brim shorter in the front and longer in the back.
- The shell will be made of a composite material that is of a high-temperature, flame and chip resistant, through-colored thermoset resin, reinforced with 1 and 2 inch chopped fiberglass molded to form a one piece structure. The shell crown will have a minimum thickness of .065 and the brim .080 inches. The outer rim will be covered with a high-temperature flame-resistant flexible rubber.
- The outer finish will be coated with a color pigmented, high gloss, abrasion, high heat and chemical resistant finish. In colors black and white.
- A helmet hanger “D ring of  $\frac{3}{4}$  inch plated nickel will be riveted to the rear center brim.
- A brass silk-screened maltese cross crown piece will be attached to the front main rib of the shell positioned to support a standard 6 inch fire department shield. In addition, 2 additional threaded studs with acorn nuts will be provided on the front of the shell for positioning and attachment of the standard 6 inch fire department identification shield.
- The impact liner, a ridged cell, high temperature urethane foam cap and attached to a flame-resistant thermoplastic PPO inner liner will be attached to the inter helmet shell.
- A 6 point attachment head suspension assembly made of  $\frac{3}{4}$  inch wide nylon straps will be attached to the impact liner at the base.
- The helmet will have an adjustable head band that can be adjusted by  $\frac{1}{8}$  inch increments using a ratchet system. The liner will consist of flame resistant flannel material that is removable and washable.
- Ear and neck protection will be provided by a 4.5 oz. Nomex outer liner sewn to a black flannel inner liner, 19 inches long by 6.5 inch wide ear flap secured to the impact liner.
- The helmet will have standard lime yellow reflective trim around the exterior crown.
- The chinstrap, consisting of 3 pieces, will be made from Nomex webbing,  $\frac{3}{4}$  inch wide, with a one hand high-temperature, super tough, quick release buckle on one side and a die cast postman’s slide buckle on the other. Overall length will not be less than 35 inches.
- The helmet will be outfitted with a wraparound face shield of a high pivot design, 4.5 inches high x 18 inches long. The lens will be .15 thick made of high performance, high-temperature resistant thermoplastic with a scratch resistant coating. It will be mounted to the helmet by 2 high-temperature, flame-resistant thermoplastic bracket assemblies with knob use to adjust the position of the shield.

**BIDDER MUST FILL IN BLANKS (LEFT MARGIN) TO INDICATE COMPLIANCE. ALL EXCEPTIONS MUST BE IDENTIFIED ON THE REQUIRED FORM TWO FOR OUR ACCEPTANCE. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL RENDER YOUR BID UNRESPONSIVE.**

4.20.2 **Firefighting Hose:** The successful Bidder shall furnish the fire hose of high quality materials that meet the following specifications:

4.20.2.1 **5" Large Diameter Supply Line; FireQuip Hydro Flow LDH**

Comply Y/N

Y

**Hose Construction:** Hose shall be made from 100% high tenacity synthetic yarn, circularly woven and completely protected and locked-in by a tough, highly resistant synthetic, extruded-through-the-weave, nitrile rubber, forming a unitized construction without use of glues or adhesives of any type. Hose meets all requirements of NFPA 1961.

Y

**Lining Properties:** Tensile Strength of the lining and cover shall not be less than 1750 PSI. Ultimate Elongation shall be 500 percent minimum. Accelerated Aging Test consists of the tensile strength and ultimate elongation of the vulcanized rubber compound which has been subjected to the action of oxygen at a pressure of 300 PSI and a temperature of 158° for a period of 96 hours while retaining 60 percent of its originally stated properties.

Y

**Abrasion Resistance:** Hose shall withstand 30,000 cycles on the Taber Abrasion Machine (H-22 Wheel: 1kg). Possible written verification may be requested.

Y

**Cold Resistance:** Hose shall have a capability of use down to -35° F. Hose shall have no apparent damage to cover, reinforcement or lining when subjected to the following cold bending test: a 50 ft. length of dry hose is to firmly coiled and placed in a cold box at -35° F for duration of 24 hours. Immediately after removal of the hose from the box, hose should be uncoiled and laid out by the operator. Following this procedure, the hose shall not leak nor show any damage to the reinforcement when subjected to the hydrostatic acceptance test pressures.

Y

**Heat Resistance:** When subjected to a static pressure of 100 PSI, hose shall be capable of withstanding a surface temperature of 1200° F for minimum of two minutes without rupture or damage to the synthetic reinforcement.

Y

**Ozone Resistance:** Hose shall show no visible signs of cracking to the lining or cover when tested in accordance to ASTM D518 Procedure B, 100 pphm at 118° F for 70 hours.

Y

**Chemical Resistance:** Exposure to sea water and contamination by most chemical substances, hydrocarbons, oils, alkalis, acids, and greases must have no effect on the short or long term performance of the hose.

Y

**Color:** Color shall be of HIGH VISIBILITY and available in red, yellow and orange.

## Product Specifications (Revised 5-15-13)

Comply Y/N

Y

**Couplings:** Standard "All Metal" Storz Red Head couplings. Couplings with any or all plastic parts will not be accepted.

Y

**Performance:** The service test pressure of hose made to these specifications shall be 200 psi. The acceptance test pressure shall be 400 psi and the burst pressure shall be 600 psi. The hose shall carry a warranty for a minimum of five (10) years against workmanship, materials and manufacturer's defects.

4.20.2.2

### 1 3/4" Attack Line; FireQuip Victory Supreme Double Jacket 800

Y

**Hose Construction:** Hose manufactured to this specification shall be of superior quality, high tensile strength, 100% polyester yarn, double jacket with an Ethylene Propylene Diene Monomer (EPDM) rubber lining. The liner is attached to the inner jacket using a rubber backing that is more flexible. This tough, durable attack line hose will withstand the rough usage of front-line firefighting. It is manufactured to a service test pressure rating of 400 psi. Hose meets all requirements of NFPA 1961.

Y

**Double Jacket Properties:** Double Jacket hose manufactured to this specification shall be tightly woven from filament polyester yarn in the inner and spun yarn in the outer jacket and be highly abrasion resistant. The hose shall be resistant to most chemicals and petrol products, and resist deterioration due to exposure to UV-Rays and ozone. It shall not be affected by rot or mildew. The hose must be of sufficient body and weight to meet the demands of heavy-duty firefighting usage. Hose will be suitable for use with foam solutions.

Y

**Lining:** The rubber lining shall be a single-ply .060 thick extruded tube of synthetic EPDM compounded to resist ozone meeting ASTM-D 518-86 C. The finished form shall be free of pits or other imperfections and have a smooth finish for better flow characteristics. No reclaimed rubber shall be used. Plastic tubes that sacrifice durability of the hose life for sake of weight are not acceptable. The adhesion between the tube and jacket shall be with a calendared backing to create a permanent bond, making the total thickness of the tube and backing .060". The use of adhesives will not be accepted.

Y

**Cold Resistance:** Remains flexible to temperatures as low as -40° F and is highly resistant to ozone and oxidation.

Y

**Performance:** The service test pressure of hose made to the specifications shall be 400 psi. The proof test pressure shall be 800 psi and the burst test pressure of a 3' sample shall be minimum 1200 psi. At 800 psi, a 50' length of hose shall not elongate more than 30". The twist of the hose shall not exceed two right hand turns per 50' nor shall it rise up from the test surface. The hose will resist kinking at temperatures as low as -40° F.

Y

**Kink Resistance:** Hose kink resistance is of utmost importance. The thickness of the inner EPDM liner and the permanent backing shall be

## Product Specifications (Revised 5-15-13)

tightly controlled to ensure a heavy-duty, kink resistant hose, with an internal waterway diameter of no less than 1.88" for 1.75" hose.

Comply Y/N

Y

**Color:** Hose shall be available in red, yellow and orange.

Y

**Couplings:** Standard "All Metal" Red Head couplings. Couplings with any or all plastic parts will not be accepted.

Y

**Service Life:** Hose has a potential service life of 10 years barring mistreatment or accidental damage that would render the hose unfit for service. Upon delivery, the fire hose will be in first-class condition, free from material or craftsmanship defects. Care and maintenance instructions for this hose will be provided.

Y

**Standards:** Hose shall meet or exceed all test performance requirements of NFPA 1961, ASTM D, Underwriters Laboratories and U.L. labeling available upon request.

### 4.20.2.3 ½" Attack Line; FireQuip Double Jacket 800

Y

**Hose Construction:** Hose manufactured to this specification shall be of superior quality, high tensile strength, 100% polyester yarn, double jacket with an EPDM rubber lining. The liner is attached to the inner jacket using a rubber backing that is more flexible. This tough, durable attack line hose will withstand the rough usage of front-line firefighting. It is manufactured to a service test pressure rating of 400 psi. Hose meets all requirements of NFPA 1961.

Y

**Double Jacket Properties:** Double Jacket hose manufactured to this specification shall be tightly woven from filament polyester yarn in the inner and spun yarn in the outer jacket and be highly abrasion resistant. The hose shall be resistant to most chemicals and petrol products, and resist deterioration due to exposure to UV-Rays and ozone. It shall not be affected by rot or mildew. The hose must be of sufficient body and weight to meet the demands of heavy-duty firefighting usage. Hose will be suitable for use with foam solutions.

Y

**Lining:** The rubber lining shall be a single-ply extruded tube of synthetic EPDM compounded to resist ozone meeting ASTM-D 518-86 C. The finished form shall be free of pits or other imperfections and have a smooth finish for better flow characteristics with a thickness of .046. No reclaimed rubber shall be used. Plastic tubes that sacrifice durability of the hose life for sake of weight are not acceptable. The adhesion between the tube and jacket shall be with a calendared backing to create a permanent bond with the total thickness of the tube and backing .052". The use of adhesives will not be accepted.

Y

**Cold Resistance:** Remains flexible to temperatures as low as -40° F and is highly resistant to ozone and oxidation.

Y

**Performance:** The service test pressure of hose made to the specifications shall be 400 psi. The proof test pressure shall be 800 psi and the burst test pressure of a 3' sample shall be minimum 1200 psi. At 800 psi, a 50' length of hose shall not elongate more than 30". The twist of the hose shall not exceed two right hand turns per 50' nor shall it rise

## Product Specifications (Revised 5-15-13)

up from the test surface. The hose will resist kinking at temperatures as low as -40° F.

Comply Y/N

Y

**Kink Resistance:** Hose kink resistance is of utmost importance. The thickness of the inner EPDM liner and the permanent backing shall be tightly controlled to ensure a heavy-duty, kink resistant hose, with an internal waterway diameter of no less than 2 9/16" for 2.5" hose.

Y

**Color:** Hose shall be available in red, yellow and orange.

Y

**Couplings:** Standard "All Metal" Red Head couplings. Couplings with any or all plastic parts will not be accepted.

Y

**Service Life:** Hose has a potential service life of 10 years barring mistreatment or accidental damage that would render the hose unfit for service. Upon delivery, the fire hose will be in first-class condition, free from material or craftsmanship defects. Care and maintenance instructions for this hose will be provided.

Y

**Standards:** Hose shall meet or exceed all test performance requirements of NFPA 1961, ASTM D, Underwriters Laboratories and U.L. labeling available upon request.

4.20.2.4

**Wildland Forestry Hose; FireQuip Wildland Ultra Forestry Hose Single Jacket TPU Lined:** This single jacket 600lb. proof test is designed for use with portable gasoline/diesel pumps, heavy duty Fire Engine Tankers and Pumpers. Light in weight, this hose is made to be transported by air, man-packed or by animal for long distances over steep and rough forested areas. All components of the hose system shall be fabricated from mildew resistant material permitting storage over extended periods of time in damp areas without concern for degradation or deterioration. All components shall be made in the USA.

Y

**Jacket properties:** The 100% polyester filaments warp yarn to be free from defects and irregularities of weave as is consistent with quality manufacturing. The polyester yarn shall be all, high strength material suitable in all respects for the manufacture of high quality fire hose. The jacket shall be constructed using a twill weave design to reduce friction loss and increase gallons per minute (GPM) flow due to the water way being smooth.

Y

**Lining:** The thermoplastic lining shall be a single-ply extruded tube, compounded to reduce deterioration by ozone. The finished form shall be free of pits or other imperfections and shall have a smooth finish. No reclaimed material shall be used. The thickness shall not be less than .016" nor greater than .020" for the 1" hose.

Y

**Color:** Hose will be available in green, red and yellow.

Y

**Performance:** Each length of hose shall be capable of a hydrostatic pressure of 600 psi for fifteen (15) seconds, without leaking in the hose or at the couplings or breaking any yarn in the jacket. Burst of a 3 ft. specimen selected from every 5000' shall with stand without failure a pressure of 900 psi, or three times the Service Test Pressure of 300 psi.



## Product Specifications (Revised 5-15-13)

Kink pressure shall be such that a random length of every lot of 2500' shall withstand without failure a hydrostatic pressure of 450 psi, or 1-1/2 times the Service Test Pressure of 300 psi while in a kink condition.

Comply Y/N

Y

**Hose Length and Diameter:** The hose shall be available in nominal 50 and 100 foot lengths. The hose shall have an inside diameter of not less than the trade size of the hose.

Y

**Couplings:** Standard "All Metal" Red Head couplings. Couplings with any or all plastic parts will not be accepted.

Y

**Warranty:** The manufacturer warrants the hose to be free from defects in materials and workmanship for a period of one year. This warranty shall provide for the repair or replacement of hose and couplings proven to have failed due to faulty material or workmanship.

Y

**Standards:** Hose shall meet or exceed all test performance requirements of NFPA 1961, ASTM D, Underwriters Laboratories and U.L. labeling available upon request.