

A New Era in Dramatically Improved Fire Fighting Hand Protection

Super Glove

American Firewear

**So Dexterous,
Now QUAD Certified:**
NFPA 1971, 2007 Edition Structural
- And -
NFPA 1999 EMS
NFPA 1951 Technical Rescue and
Recovery
NFPA 1951 Technical Rescue/Utility



Patented and Patent Pending

**True 3-D Hand Shaped
Styling with Staggered
Layer Seaming**

Patented and Patent Pending

**Bubble-Flex and
Flex-Tuck Construction
with Dead Air Spacer
Ridges**

Proprietary and Patent Pending

**Digiroot™ High Grip
Palm and Fingers**

Patented and Patent Pending

**Air Spacer™ Thermal
Architecture Traps Air
for Thermal Protection
without Traditional
Bulk**

Patented, Patent Pending, Proprietary

**Ultra Thin, Ultra Strong
Kangaroo Back Outer
Shell**

**Crosstech®
Moisture Barrier**

**Kevlar®/Nomex®
Thermal Liner**

Made Domestically

- Your Manufacturer Will be Accessible for After-sale Support and Service
- Sizes Will Not be Restocked Over Slow Boats from Distant Sites
- Berry Amendment Compliant

**Patented, Patent Pending and Proprietary Technology
that Delivers Phenomenal Dexterity
with Enhanced Protection!**

The Competition Does Not Even Come Close!

True 3-D Hand Shaped Styling with Staggered Layer Seaming (Patented and Patent Pending)



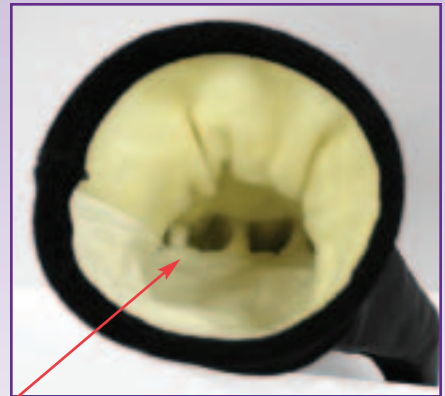
Built in the anthropomorphically correct 3-D shape of the hand, so no "pull" at rest, or extra resistance at start of flex.



True 3-D Hand Shaped Styling makes hand movement less opposed and less stressful.

In contrast, a flat 2-piece glove with leather trim "looks" 3-D, but it is essentially two pancakes sewn together.

Note 3-D openings into the fingers and opened glove body for easy donning vs the 2-D leather-trimmed "look."



2-D gloves "collapse" and inhibit donning/doffing.

3-D openings into fingers and glove body assist and ease donning/doffing as the glove is "self shaped," not hand "riding."

Bubble-Flex and Flex-Tuck Construction with Dead Air Spacer Ridges (Patented and Patent Pending)

Your fingers "grow" with motion; so does the Super Glove, so hand motion and grip are dramatically improved.

Bubble-Flex and Flex-Tucks not only "ease" motion, they increase effective insulation since the glove is not normally pulled tight to the skin... an insulating "blanket" of air is always retained.

Dead Air Spacer Ridges preserve the air spaces both in the liner and outer shell.



Bubble-Flex and Flex-Tuck construction deployed...



The Competition Does Not Even Come Close!

**Unique Materials that Offer Superior Tactility,
Thinness, Feel, and Enhanced Insulation**

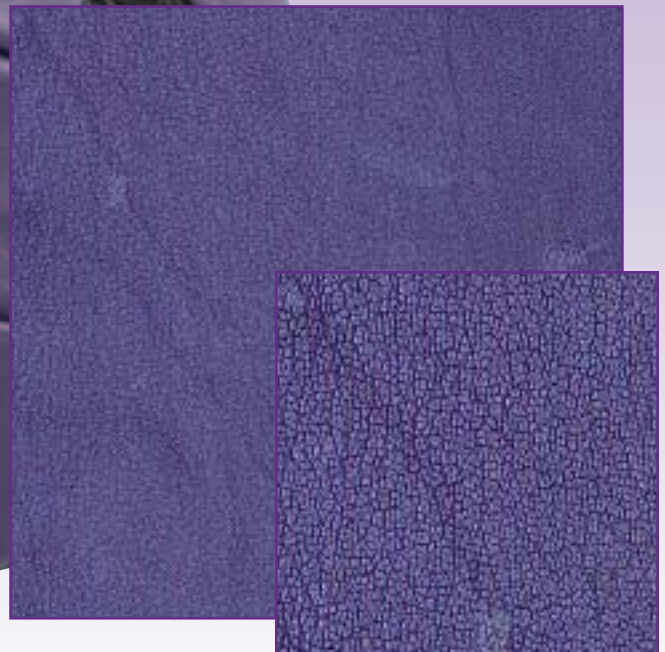
(Patented, Patent Pending and Proprietary)

Exterior Materials



**Eversoft Black
Cowhide Cuffs**

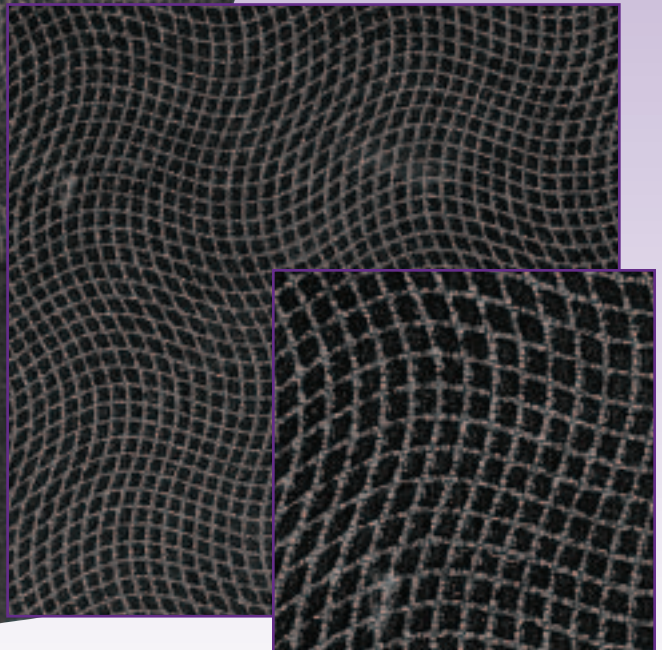
**Top Grain
Kangaroo
Back Outer
Shell**





**Digiroom™
Digital
Kangaroo
Palm and
Fingers**

Delivers incredible durability, grip, and tactility with unprecedented thinness.



The Competition Does Not Even Come Close!

Interior Materials – Unique Materials that Offer Superior Tactility, Thinness, Feel, and Enhanced Insulation

Air Spacer™ Thermal Lining Architecture Traps Air for Thermal Protection without Traditional Bulk

(Patented and Patent Pending)

Air Spacer™ Back – Unique 3-D Kevlar®/Nomex® micro-spaces preserve highly insulative microcapsules of air for thermal protection without bulk. This is supported by thermally spaced architecture of the glove shell.

Air Spacer™ Face – Separate Kevlar®/Nomex® micro-architecture on soft lining face for yet another layer of insulating air. This is supported by thermally spaced architecture of the glove shell.



Top Grain Kangaroo Back Outer Shell

Kangaroo Leather is widely accepted as being one of the strongest light-weight leathers available. Yet the reasons for this strength are not widely appreciated.



Studies conducted by the Australian Commonwealth Scientific and Industrial Research Organization (CSIRO) confirm that kangaroo is one of the strongest leathers of similar substance available (Stephens 1987).

Similarly gauged kangaroo splits are stronger than other common fire glove leathers.

Studies of the morphology of kangaroo leather compared to bovine help explain these remarkable differences. The collagen fiber bundles in cattle hide are arranged in a complex weaving pattern. The fibers are often at angles as much as 90 degrees to the skin surface. Cattle hide also contains sweat glands, erector pili muscles, and a distinct gradation in elastin levels, concentrated in the upper part of the skin.

Kangaroo, on the other hand, has been shown to have a highly uniform orientation of fiber bundles in parallel with the skin surface. It does not contain sweat glands or erector pili muscles, and elastin is evenly distributed throughout the skin thickness (Bavinton et al 1987). This structural uniformity explains both the greater tensile strength of the whole leather and the greater retention of strength in splits. Bovine skin is much more complex in cross section. Hence in whole section it has many more weak points from which tears can start when placed under tension. In addition, when sliced into splits the collagen fibers running at significant angles to the skin surface will be cut. These then become weak points in the structural strength.

Thus the structural uniformity in the morphology of kangaroo leather readily explains its dramatic strength and the retention of this strength when split.

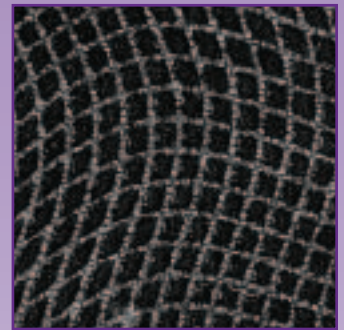
This uniformity requires efficient fat liquoring and staking to obtain optimal results from processing. These processes have the effect of un-sticking fiber bundles from each other, thereby enabling each bundle to move independently. Since kangaroo fibers are aligned parallel to each other they contact other

fibers along much of their length. Bovine fibers on the other hand only contact other fibers at the points where they intersect with them.

Kangaroo leather is a true breakthrough. It not only stands up to abrasion, but is strong enough for any normal fire fighting task. Densely packed fibers keep water absorption to a minimum, and, despite its "top grain" appearance, kangaroo leather does not become slippery when wet.

Digiroom™ Digital Kangaroo Palm and Fingers

American Firewear has used kangaroo leather now for over 5 years with tremendously positive field results and demand. The Super Glove extends the advantages of kangaroo with Digiroom™ digital kangaroo on the palm and fingers for incredible dexterity and grip with unprecedented comfort.



Crosstech® versus Polyurethane Moisture Barrier

For high breathability, heat resistance and continuous moisture barrier protection, the Teflon® based Crosstech® glove inserts have superior performance (see one competitor's low cost, low quality polyurethane product example in the photo below).

With almost 20% of all fireground injuries reported to the hands, and almost half of these burns, lower temperature resistant and less breathable polyurethane barriers are really no bargain. In addition, the Teflon® composition of Crosstech® will withstand heat exposures that can damage the leather shell, while polyurethane barriers can melt and leak with no external indication visible to the end user.



Questionable hand painted seam sealing of competitor's low end Polyurethane Moisture Barrier glove

The Competition Does Not Even Come Close!

Super Glove Highlights



True 3-D Hand Shaped Styling with Staggered Layer Seaming

Black Eversoft Cowhide Cuffs, Front and Back

Black Digiroom™ Digital Kangaroo Grip Palms and Fingers for Incredible Durability, Grip and Tactility with Unprecedented Thinness

Sizing Cut-Style:
Regular Sizes: XXS, XS, S, M, L, XL, 2XL, 3XL
Cadet Sizes: XXS, XS, S, M, L, XL, XXL, XXXL

Available with Gauntlet (Shown) or Wristlet Cuffs

High-temperature Stable and Durable Crosstech® Moisture Barrier and Kevlar®/Nomex® Thermal Liner

Top Grain Kangaroo Leather on Glove Back for Easy Flex and Exceptional Durability



Bubble-Flex and Flex-Tuck Construction with Dead Air Spacer Ridges Allow Natural Hand Flexing

Air Spacer™ Thermal Architecture Traps Air for Thermal Protection without Traditional Bulk



**AMERICAN
FIREWEAR**

Total Fire Group

#1 Innovation Court • Dayton, OH 45414
Phone: (937) 264-2662 • Fax: (937) 264-2677
e-mail: info@totalfiregroup.com
www.totalfiregroup.com
1-800-688-6148

ISO 9001:2000

American Firewear

2397 Harts Ferry Road • Ohatchee, AL 36271
Phone: (256) 892-2980 • Fax (256) 892-4644
e-mail: info@firewear.com
www.firewear.com
1-800-264-3333