



General Comments on Glove Design and Sizing

Proper Sizing

Proper sizing is a key element in glove dexterity. It is important that gloves are the appropriate size for the individual. While proper sizing may appear simple, it can be complicated by factors such as doffing and donning, finger length, thumb design and outer shell materials.

Often, firefighters will choose gloves that are too large because they are easier to doff and don. Sloppy fitting gloves, however, are just as unsafe as gloves that are too small. When gloves are too big, firefighters tend to remove them to perform routine operations, which leaves their hands exposed to potential injury. Often firefighters will remove their gloves because they cannot feel what they are doing.

Some firefighters choose gloves that are too small. Usually, this involves the firefighter not using his wristlets, which leaves a vulnerable interface area exposed. More importantly, choosing gloves that are too small leaves the hands susceptible to burns, as it compresses the thermal protection. Even with gloves that are too small, many firefighters still take their gloves off to complete routine tasks.

When you take all of these issues into consideration, glove sizing sounds like a complicated issue. This is because gloves are a very complicated, but key, element of the firefighter's ensemble. It is important that firefighters understand the key areas of glove design so that they will understand the limitations to dexterity and tactility.

Finally, firefighters need to practice the structural functions in their gloves as much as possible so that they become comfortable with the gloves. Remember: there is no protection at all if you take the gloves off.

How to Size Firefighter Gloves

The most efficient way to assure proper glove fit is to use a sizing set of gloves.

Have the following sizes on hand:

- SM
- MD
- LG
- XL
- 2X

If the gloves are slightly used and broken in, all the better.

Your hands should be able to feel the glove everywhere, but the glove should not be so tight as to prevent finger movement or balling of the fist.



Look at the space between the fingers to ensure that the material of the glove is deep enough between the fingers to the crotch area, and that it is close to the bottom of the V formed between your fingers.

Doffing and Donning

Designs that making doffing and donning easier often directly affect the grip of the glove. Gloves with wide hand openings, or that are wider in the palms, have decreased gripping power. In addition, some soft and fuzzy lining systems can also take away from gripping power. The more the hand is able to slide about and move within the glove, the more the gripping power is reduced.

Textured lining systems have better gripping power, but it comes at the cost of more difficult doffing and donning. There are gloves that provide excellent palm dexterity when donned, but donning them can be difficult and perhaps impossible with wet hands.

Prepared by Allen Rom

METRO Department Senior Sales Manager
Fire-Dex, LLC
780 South Progress Drive
Medina, OH 44256
330-723-0000 ext. 312
Fax 330-723-0035

With substantial contribution by Mike McKenna

Michael McKenna & Associates, LLC
916-217-8815
mike@mckennafire.com