American National Standard for Performance and Classification for Impact-Resistant Gloves
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Secretariat
International Safety Equipment Association

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American National Standard

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Foreword (This Foreword is not part of American National Standard ANSI/ISEA 138-2019)

The human hand is one of the most important tools in a work environment, regardless of the task being performed. It is also most vulnerable to occupational injury, ranking high among all injury types, with an average total cost per incident of more than $22,000 according to some reports. Standards and guidance have been in place for certain types of hand injuries such as those caused by cuts, punctures and chemical exposure; yet there has been no standardized approach to address dorsal or back-of-hand injuries such as bone breakage and fractures, bruising and finger pinching. The decision-making process becomes more challenging given wide available of glove designs with varying performance claims.

To address the gaps in appropriately evaluating performance of a glove’s dorsal protection and assist employers in making informed product selections, the International Safety Equipment Association (ISEA) has developed this new standard to establish testing, classification and labeling requirements that offer back-of-the-hand impact protection. These are commonly used in the automotive, heavy equipment and construction operation, cargo handling, oil/gas and towing/transportation industries.

Compliant gloves are evaluated for their capability to dissipate impact forces on the knuckles and fingers and are classified accordingly. The resulting classifications can be used by employers as a reliable means of comparing different products on an equal basis when selecting hand protection relative to the tasks being performed.

This standard was prepared by members of ISEA’s Hand Protection Group. The following companies were members of the group at the time of the approval of the standard:

- Ansell Protective Products
- Magid Glove and Safety Mfg. Co. LLC
- Bob Dale Gloves
- Majestic Glove
- Conney Safety Products
- MCR Safety
- D3O
- National Safety Apparel
- DSM Dyneema
- OccuNomix International LLC
- DuPont Safety & Construction
- Protective Industrial Products Inc.
- Ergodyne
- Pyramex Safety
- Global Glove and Safety
- Radians Inc.
- HexArmor
- Saf-T-Gard International
- Honeywell Safety Products
- Superior Glove
- Ironwear
- Wells Lamont Industrial
- Kimberly-Clark Professional
- World Fibers, Inc.
- Lakeland Industries, Inc.

Approval of this standard was based on the consensus procedures prescribed by the American National Institute. The following organizations were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to ANSI.

- Carl W. Heinlein, ARM, CSP, CRIS
- National Institute of Standards and Technology
- Concurrent Technologies
- Ringers Gloves
- Cudd Energy Services
- Safety Equipment Institute
- FCx Performance
- Stony Brook University Hospital
- Honeywell
- University of Wisconsin-Milwaukee
- KLME Martin Associates
- Watson Gloves
- Luck Companies
- YPF, SA (Argentina Oil Company)

Suggestions for the improvement of this standard are welcome. They should be sent to the ISEA, 1901 N. Moore Street, Suite 808, Arlington, VA 22209; e-mail standards@safetyequipment.org.
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