
Raising the Standard

As a member of the ISEA board and their hand protection sub-committee group, HexArmor® has been working closely with the ISEA and other leading glove manufacturers to develop and implement this new ANSI/ISEA impact standard. In an industry first, the International Safety Equipment Association (ISEA) has developed a new voluntary standard: ANSI/ISEA 138, American national standard for performance and classification for impact resistant hand protection.

What Will the New Impact Standard Do?

Published February 27, 2019, the new ISEA 138 standard establishes the minimum performance, classification and labeling requirements for gloves that are designed to protect the knuckles and fingers from impacts. This will help safety professionals make better-informed decisions about glove selection – ultimately keeping more people safe on the job.

How Does the Impact Test Work?

One pair of gloves is required per test. The gloves are cut in half, and the back-of-hand is placed on an anvil. A striker with a force of 5 joules is dropped on the required back-of-hand locations. The amount of force transferred through the glove back-of-hand is recorded with a force gauge that is connected below the anvil.

The ISEA 138 will test two areas for impact performance: knuckles and fingers/thumb. On both gloves, knuckles are tested four times while fingers/thumb are tested five times. The average of the knuckle tests is compared to the average of the ten finger tests. The highest average of the two (the highest amount of force transferred which delivers a lower score) is the final impact testing score. The chart below, which includes glove markings, showcases the performance levels, with "Performance Level 3" being the highest.
EN388 vs. ISEA 138 – What’s Different?

In 2016, the EN388 was updated to include impact testing performance ratings. Although the EN388 testing method is similar, the testing areas and scoring are different. EN388 only tests the impact on the knuckles and are given a pass or fail score – no performance levels. To pass, the transmitted force needs to be less than or equal to 7 kilonewtons with no single results greater than 9 kilonewtons.

The ISEA 138 tests on all fingers and knuckles and are rated with performance levels 1-3. This inclusion of fingers is critical for industrial glove users, whose fingers are usually at high risk for injury.

ISEA 138 gives more choice and flexibility to the end-user. With a performance level scale, workers can make better-informed decisions as to what type of glove will give them the appropriate level of impact protection based on the hazards they may face.

ISEA 138 Requires Lab Testing

The ANSI/ISEA 138 standard is unlike most standards from ANSI, where PPE manufacturers are on an honor system when it comes to publishing test results. ISEA 138 requires testing in a lab that meets the laboratory conformity assessment standard IOS/IEC 17205. This helps increase the credibility of glove performance level claims and is a progressive step for ANSI/ISEA.

All performance levels will be displayed directly on the gloves to give safety professionals a simple visual of what the performance standard is.

HexArmor® Can Help

Our line-up of premium glove selections for countless applications sets us apart – and so does the level of quality and standards we uphold. Have questions about the new standard? Curious which HexArmor® gloves meet the standard? We're here to help! Contact us at info@hexarmor.com or reach out by phone at 1.877.MYARMOR.