

## SEI CERTIFICATION

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### What is SEI?

SEI is Safety Equipment Institute, a not-for-profit organization that provides certification services for protective equipment in a number of areas, including laboratory clothing, chemistry lab equipment, and head protective products. SEI is located in McLean, Virginia.

### What does SEI do?

SEI serves as a coordinator and administrator for product certification programs. For a given product, SEI selects the existing standard that they believe is most appropriate for the product, selects a quality auditor to review and critique the manufacturer's manufacturing procedures, selects the test lab where the products will be tested, and arranges for periodic follow-up quality audits and product checks. For equestrian helmets, SEI has selected ASTM standard F1163 as the most appropriate standard for evaluating performance of the helmets. SEI has chosen Inspec as the quality auditor, and Intertek Testing Services (ITS) and Southern Impact Research as the test labs for equestrian helmets.

### What does ASTM do?

ASTM is one of the world's most respected standards organizations, with over 33,000 standards covering the range from curing of concrete to prison security to hotness of red peppers to protective headgear. Volunteers from fields including mechanical engineering, biomechanics, medicine, materials science, manufacturing, quality and testing convene twice each year to review the current versions of headgear standards, discuss potential modifications based on new information that has been learned, and propose ballot changes to standards. The current version of the equestrian helmet standard includes (i) requirements for coverage of the head, (ii) performance under impact with steel anvils, (iii) ability of the retention system to withstand a strong jerking load, (iv) ability of the retention system to retain the helmet in position on the wearer's head, and (v) information that must be provided by the manufacturer to the consumer. The ASTM standard is widely used internationally as a basis for the standards developed in other countries.

### What is the procedure for certifying a product?

When a manufacturer wishes to certify an equestrian helmet, he contacts SEI and submits product design and manufacturing information. This information defines the

product so SEI can check later production to see if anything has changed. If the manufacturer has not previously certified products through SEI, SEI will arrange for a quality auditor to visit the manufacturer's facilities, follow the entire design and manufacturing process, and ensure that products are produced reliably and consistently. The auditor will study the manufacturer's quality manual, and ensure that the manufacturer has appropriate procedures and capabilities to handle a recall should one be necessary.

Once the quality system is deemed adequate, the manufacturer sends samples of the product to ITS, and SEI authorizes testing to begin. If the samples satisfy the testing requirements, and the manufacturer has fulfilled all of the administrative requirements, SEI will grant certification to the product, and add it to the SEI Certified Products List, which is available at [www.SEInet.org](http://www.SEInet.org). The quality auditor will visit the manufacturer six months later to confirm that the quality system is still adequate, and will select random samples of the product from inventory for re-testing at ITS. Thereafter, the auditor will visit the factory once each year to audit the quality system and select sample products for testing. The manufacturer is required to pay for all of these services, so it is in his best interest to refine the product and the quality system as much as possible to ensure that certification will be maintained.

### Why is SEI certification important?

Because of the rigorous procedures for obtaining SEI certification, the consumer can be sure that any product bearing the SEI mark is manufactured to stringent requirements. Random samples of the product are tested periodically by the SEI-contracted lab, so the manufacturer must be certain that every single product he produces will satisfy all of the testing requirements. Products certified by SEI can be depended on for consistency, quality, and measurable performance. In the case of equestrian helmets, every helmet bearing the SEI mark must be capable of satisfying the impact and retention requirements of the ASTM standard, which has been proven to reduce the risk of head injuries in equestrian activities. Every equestrian helmet manufactured by Troxel is fully certified by SEI; we will not sell helmets that are not SEI-certified.