

What you need to know about ISO 17712:2010

ISO 17712 (2010) was first published in September 2010 and included an 18-month transition period (to March 2012) to deal with technical issues. The new standard is the third generation of 17712. The first was a Publicly Available Specification (PAS) published in 2003 and the second was a revision to PAS 17712 published in 2006. Each revision builds on previous requirements.

ISO 17712 establishes “uniform procedures for the classification, acceptance, and withdrawal of acceptance of mechanical freight container seals”. The standard defines the various types of security seals and describes the performance requirements for each product type as well as details of testing specifications.

International Standard ISO 17712 replaced ISO's Publicly Available Specification (ISO/PAS) 17712 in September 2010. The Standard refined test procedures and added a technical specification for bolt seals. More importantly, the Standard added new test requirements for tamper evidence that apply to all seals that claim ISO compliance, regardless of type. Tamper evidence test certification goes into effect 1 March 2012, after an 18 month transition period. General requirements stipulate that mechanical security seals must be:

- Strong and durable against weather, chemical action and undetectable tampering.
- Easy to apply and seal.
- Permanently and uniquely marked and numbered.
- Marked with an easily identifiable manufacturer's logo.

The standard has three major features, each of which requires documentation of compliance by properly accredited test laboratories or business process auditors; the labs and auditors must have ISO 17712 as the scope of competence.

1. Testing of physical strength (as barriers to entry).
2. Auditing of manufacturer's security-related business practises
3. Testing of a seal's ability to indicate evidence of tampering.

Physical strength. ISO 17712 defines three classes of seal strength or barrier capacity: "I" Indicative, "S" Security and "H" High Security; **cargo security programs such as C-TPAT call for "H" class seals.** Suppliers must use independently third party test laboratories to validate a seal's classification. Labs must be accredited according to ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories.

Manufacturer's security related business practises. Immature or careless security-related practices can undercut the effectiveness of the highest quality security seals. ISO 17712's Annex A (normative) defines more than two dozen required practices, such as maintenance of quality assurance programs (ISO 9001), facility risk assessment, seven year data retention programs for all seals, and access control to production and storage areas.



To demonstrate conformance with Annex A, suppliers must be audited by an independent process certification provider (such as an ISO 9001 auditor) accredited to audit conformance with ISO 17712.

No supplier can sell any seal as "ISO 17712 compliant" unless that firm has the proper independent certification that the firm's security-related business practices conform to Annex A. ISO 17712 is explicit: only firms in conformance with Annex A may place an "H", "S" or "I" class indicator on a seal.

Testing is a seal's ability to indicate evidence of tampering. The primary reason to use a security seal is to provide evidence of attempts to tamper the seal. In ISO 17712's tamper test procedures, laboratory tamper attempts must leave detectable evidence of tampering in each of the three tests; three successes earn a "Pass" grade but an "undetectable" result on any test generates a "Fail" grade for the seal. All classes of seals - "I", "S" and "H" - must earn "Pass" grades to qualify as 17712 compliant.

So, how can you tell the difference between those who comply and those who don't?

There are two positive ways of knowing if the supplier and their products conform to the requirements of ISO/PAS 17712.

Ask For Proof and beware of fraudulent documents

Ask the supplier for copies of conformance certificates for product testing and security-related business practices (normative Annex A). The certificates are usually summary cover pages from test and audit reports.

As of March 2012, conformance must cover tamper evidence testing. You may also ask for certification that the lab and auditor are properly accredited according to ISO procedures, such as ISO 17025 for independent third party test laboratories.