



## Standard Classification for Security Seals<sup>1</sup>

This standard is issued under the fixed designation F 832; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

<sup>ε1</sup> NOTE—Section 6, Keywords, was added in November 1994.

### 1. Scope

1.1 This classification covers categories of commercially available security seals. Special-purpose seals, such as fiber optic and sophisticated electronic seals, are not covered by this classification.

### 2. Terminology

#### 2.1 Definitions:

2.1.1 *security seal*—a passive, one-time locking device to detect tampering or entry, and may be of substantial construction. Seals require inspection to indicate whether tampering has occurred or entry has been attempted.

2.1.1.1 *barrier type security seals*—seals that are constructed and manufactured of material such as steel or cable with the intent to delay intrusion, and are generally removed with quality bolt cutters or cable cutters.

2.1.1.2 *indicative type security seals*—seals that are constructed and manufactured of material that can easily be broken by hand or simple snipping tool or shear.

### 3. Significance and Use

3.1 This standard is intended to provide information on currently available commercial seals as a guide in their selection for specific applications. This classification is not intended to inhibit innovation or development of new types of seals.

### 4. Basis of Classification

4.1 Security seals in this standard are classified by their configuration and the material from which they are made.

### 5. Types of Seals

5.1 *Wire*—Wire seals consist of a length of wire secured in a loop by some type of seizing device. Examples of this type are crimp wire, fold wire, and cup wire.

5.2 *Padlock*—The padlock type of seal consists of a locking

body with a bail attached. Examples of this type of seal are the wire shackle padlock (metal or plastic body), plastic padlock, and keyless padlock.

5.3 *Strap*—The strap seal is a metal or plastic strap which is secured to form a loop by inserting one end into or through a locking mechanism on the other end. Examples of this type are the box and ball end seal.

5.4 *Cable*—The cable seal consists of a cable and a locking mechanism. On a one-piece seal, the locking or seizing mechanism is permanently attached to one end of the cable. A two-piece cable seal has a separate locking mechanism which slips onto the cable or prefabricated end.

5.5 *Bolt*—The bolt seal is a metal rod, threaded or unthreaded, with a formed head, and is secured with a separate locking mechanism. Threaded bolts are usually bent after installation to upset the threads and prevent undetected removal of the locking mechanism.

5.6 *Cinch or Pull-Up*—The cinch or pull-up type is an indicative seal. It consists of a thin strip of material, serrated or nonserrated, with a locking mechanism attached to one end. The free end is pulled through a hole in the locking mechanism and drawn up to the necessary tightness. Cinch or pull-up type seals may have multiple lock positions. These seals are generally made of synthetics such as nylon or plastic and should not be compared to simple electrical ties.

5.7 *Twist*—Twist seals are made of steel rod or heavy gage wire of various diameters, which is inserted through the locking fixture and twisted around itself by use of a tool.

5.8 *Scored*—This seal is a metal strip which is scored perpendicular to the length of the strip. The strip is passed through the locking fixture and bent at the score mark. Removal of the seal requires bending at the score mark which results in breakage of the seal.

5.9 *Label*—Label seals are frangible seals consisting of a paper or plastic backing with adhesive. The combination of backing and adhesive are chosen to cause the seal to tear when removal is attempted.

### 6. Keywords

6.1 barrier security seal; indicative security seal; locking device; security seal

<sup>1</sup> This classification is under the jurisdiction of ASTM Committee F-12 on Security Systems and Equipment and is the direct responsibility of Subcommittee F12.50 on Locking Devices.

Current edition approved Jan. 26, 1990. Published March 1990. Originally published as F 832 – 88. Last previous edition F 832 – 88.