



Conserve O Gram

July 1995

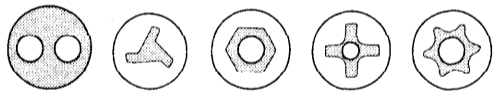
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Tamper-Resistant Fasteners For Museum Exhibit Cases

Many museums have exhibit cases that are secured with standard screws. Since standard screws are easy to remove, the security of museum objects exhibited in these cases is compromised, especially when the museum relies upon the case alone to provide security for the objects inside. Museum thefts can occur, even at institutions with full-time guard staffs, because intruders may easily gain entry to poorly secured exhibit cases.

A simple, cost-effective way to deter theft and reduce the chance of vandalism to exhibit cases is to ensure that exhibit cases are secured with tamper-resistant fasteners. These fasteners should be installed on all new exhibit cases; existing cases should be retrofitted. While this security measure cannot prevent theft, it discourages exhibit case entry by the casual thief or vandal and provides an extra measure of protection, especially in areas where exhibit surveillance is limited.

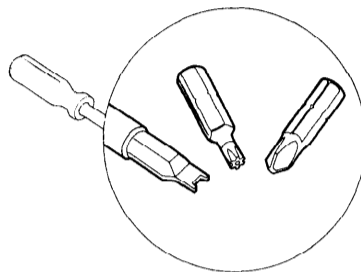
Tamper-resistant fasteners use unique head designs and/or uncommon recesses or slots.



Examples of Screw Head Designs

They require specialized tools such as non-standard screwdrivers, wrenches, sockets or spanner head drivers with unusual configurations to remove them. With the specialized tool, the museum staff has access for exhibit maintenance,

object examination, housekeeping, pest management tasks, and emergency entry as required.



Screwdriver with Security Screw Bits

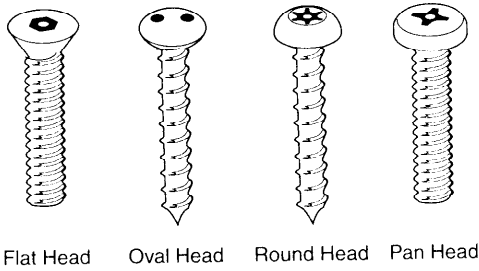
Tamper-resistant fasteners should be installed to secure:

- Plexiglas® vitrines or glass panels where they join or attach to the exhibit case
- exhibit case entry doors which are not secured by keyed locks
- exhibit case light chamber access panels where the chamber provides access to artifacts
- exhibit case climate control access panels where the chamber provides access to artifacts

Replace Regular Screws with Security Screws

Various manufacturers have developed security screws. You can purchase both standard- and machine-thread security screws in a variety of design types for replacing regular screws. Security screws are available in various sizes and lengths for use in wood, metal, and plastic

surfaces. Like standard screws, security screws are also available in a variety of head styles, for example, flat, oval, round, and pan.



Examples of Standard- and Machine-thread Security Screws

Purchasing security screws in small quantities can be expensive if you have only a few cases to secure. You should consider availability and standardization when selecting a screw type. Some manufacturers provide pre-stocked kits that include several different types of screws and drivers. (See page 3 for sources for security screws and kits.)

Additional security can be gained by mixing different types of security fasteners in exhibit installations. This dual installation forces would-be intruders to have two or more different tools. Such installations also require intruders to take greater risks since more time is required to gain entry to cases. While in-house routine or emergency access may be delayed by the installation of different types of screws, one must weigh the inconvenience against the possibility of losing an item to theft or vandalism.

Installing Tamper-resistant Fasteners

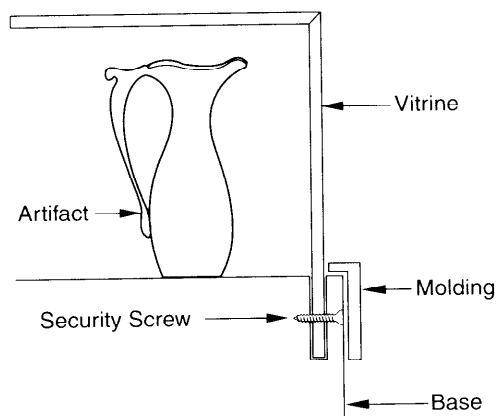
- Consider the case construction before putting in the new fasteners to determine if removing and replacing fasteners could damage the case.
- Use the existing holes. Relocating fasteners may cause damage to the exhibit case, the plexiglas, or glass.

- Use a tamper-resistant fastener the same size and thread as the one removed; a larger one can damage the exhibit case or a smaller one may not properly secure the case.

Security for New Exhibit Case Construction

When providing new exhibit case specifications, keep in mind the following:

- Countersink screws so that the heads don't protrude. This is especially important for pan head screws that can be removed with pliers if the heads are not recessed.
- Hide access to screws and locking devices on exhibit cases from causal view, both for security and aesthetic reasons, with molding. Molding can be held in place with Velcro® or clips. Glue and finishing nails are not recommended because they don't readily allow maintenance or emergency access to the case.



Caution: Intruders often work in teams to alert one another to patrolling guards. They may also use diversions to keep staff and visitors from observing their actions. Patient intruders may return repeatedly to remove a few screws at a time until they can gain access. Instruct park protection and curatorial staff to regularly check

for signs of tampering, for example, missing molding, scratches on screw head surfaces, crews that are partially removed. Include checking for signs of tampering in the park's opening and closing procedures.

NOTE: After tamper-resistant fasteners have been installed on exhibit cases, secure the screwdriver and any specialized bits or tools like museum keys: in a keybox, locked file cabinet, or locked museum storage cabinet. Access to the screwdriver and bits should be strictly limited to park staff who have responsibility for the museum collections.

References

Liston, David, editor. International Council on Museums (ICOM) and The International Committee on Museum Security *Museum Security and Protection: A Handbook for Cultural Institutions*. New York: Routledge Inc., 1993.

Keller, Steven R. *Protecting America's Heritage: A Ranger's Guide to Museum Physical Security*. Florida: Steven R. Keller and Associates, Inc., 1988.

Raphael, Toby. "Conservation Guidelines: Design and Fabrication of Exhibits." Available from Harpers Ferry Center, Division of Conservation, Harpers Ferry, WV 25425.

Sources

Dzus Fastener Co., Inc.
425 Union Boulevard
West Islip, New York 11795
(516) 669-0494; Fax (516) 669-0785

Onyx Fasteners, Inc.
1349 Princeton Avenue
Trenton, New Jersey 08638
(609) 396-2626; Fax (609) 396-7755

Tamperproof Screw Co., Inc.
30 Laurel Street
Hicksville, New York 11801
(516) 931-1616; Fax (516) 931-1654

Matthew Wilson
Curator
Rocky Mountain System Support Office
National Park Service
Denver, Colorado 80225-0287

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