

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

August 29, 2003

SPECIFICATION FOR VANDAL-PROOF
SIGN BOLT SYSTEM

1. DESCRIPTION

This specification covers the requirements for furnishing 5/16-inch x 2.5-inch (M8 x 1.25 x 65) and 5/16-inch x 3-inch (M8 x 1.25 x 80) one-way aluminum bolts with breakaway nuts for attaching traffic signs to posts.

2. GENERAL REQUIREMENTS

2.1 BOLTS. Plain 2024-T4 Aluminum 5/16-inch x 2.5-inch (M8 x 1.25 x 65) and 5/16-inch x 3-inch (M8 x 1.25 x 80) bolts with minimum 9/16-inch (14.3 mm) diameter one-way heads and 5/16-18 (M8 x 1.25) UNC-threads to within 1-inch (25 mm) of head.

2.2 NUTS. Plain 5/8-inch - 2011-T3 Aluminum double-chamfered hexagon nuts combined with self-locking conical shape 9/16 (14.3 mm) - 3/8-inch (9.5 mm) by 3/16-inch (5 mm) unit under the nut with 5/16-18 UNC (M8 x 1.25) threads. The hexagon portion should break away from the self-locking unit with 40 (4.5 N•m) to 80 inch-pounds (9 N•m) of torque.

2.3 WASHERS. Units shall be nylon, 1/8-inch (3.2 mm) thick by 1-inch (25 mm) minimum outside diameter. Maximum allowable applied torque shall be 480 inch-pounds (54 N•m).

3. PACKAGING

100 bolts and nuts per box, clearly labeled on at least one end of box.



Arthur H. Breneman, P.E.
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