

Commonwealth of Pennsylvania  
Department of Transportation

**SPECIFICATION FOR BREAKAWAY CHANNEL BAR POSTS**

July 1, 2003

**1. DESCRIPTION**

This specification covers the requirements of furnishing breakaway channel bar posts.

**2. GENERAL REQUIREMENTS**

All items shall conform to the required shape, dimensions, and weight as indicated on the attached drawings.

**3. MATERIAL REQUIREMENTS**

**3.1 Sign Posts and Anchor Posts.** These units shall be rolled from standard carbon steel rails conforming to ASTM -A499 with a minimum yield strength of 60,000 psi, and a minimum tensile strength of 90,000 psi.

**3.2 Formed-Channel Sign Mounts.** These units shall be mild steel.

**3.3 Spacer Nut.** These units shall conform to ASTM A36.

**4. COATING REQUIREMENTS**

**4.1 Sign Posts, Anchor Posts, Anchor Plates, and Formed-Channel Sign Mounts.**

The coating shall conform to one of the following.

1. Green paint in accordance with ASTM G-53-84, Federal Color No. 595.14062.
2. Green polyester coating in accordance with current Department Specifications for Polyester Coating on Traffic Sign and Delineator Posts.
3. Hot-dipped galvanized, after fabrication, in accordance with ASTM-A123-02 as applicable.

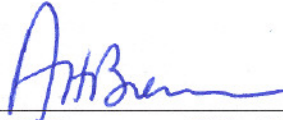
**4.2 Spacers, Anchor Bolts, Lock Washers, and Nuts.** These bolts, washers, and nuts shall be cadmium plated in accordance with ASTM B766-86, except using clear chromate, or shall be zinc plated in accordance with the requirements of ASTM B633-98.

## 5. PACKAGING

5.1 **Bundling.** The following items shall be bundled or boxed accordingly:

Sign/Anchor Posts ----- 50 per bundle  
Formed-Channel Sign Mounts ----- 25 per bundle  
Spacers, Anchor Bolts, Nuts, and Lock Washers --- 200 sets per box or bag

5.2 **Crating** Small parts (such as spacers, hardware in boxes or bags, drive caps, and anchor plates) shall be packed in wooden or cardboard crates for shipping. More than one item may be combined in the same crate, but crates shall not exceed 2,000 pounds in total weight. The name and quantity of each commodity contained in the crate shall be clearly marked on all four sides of the crate.



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Traffic Engineering and  
Operations Division  
Bureau of Highway Safety and  
Traffic Engineering

### Attachments

(S:\BUREAU OF HIGHWAY SAFETY AND TRAFFIC ENGINEERING\TEOD\SPCS\SIGN POST SPECS\BREAKAWAY CHANNEL BAR  
POST 030701.DOC)

5/16"-18 UNCx2.25  
HEX HEAD BOLT,  
FULLY THREADED,  
GRADE 9.

5/16" WASHER,  
GRADE 9.  
(2 REQ'D.)

1" DIA. x 0.625" THK.  
ZINC PLATED SPACER  
WITH 0.438" HOLE.  
(2 REQ'D.)

NOTE:  
BOLTS, NUTS AND WASHERS ARE  
CADIUM OR ZINC PLATED FOR  
CORROSION RESISTANCE.

← SIGN POST

HEX HEAD, INTEGRAL  
FLANGED LOCK NUT  
OR STANDARD GRADE 9  
HEX HEAD NUT AND  
LOCKWASHER.

← BASEPOST

## BASE-BOLTED SIGN POST SYSTEM

NO SCALE

