

SECTION 678—PERMANENT BARRICADES

678.1 DESCRIPTION—This work is construction of permanent barricades.

678.2 MATERIAL—As shown on the [Standard Drawings](#) and as follows:

(a) Posts.

1. Wood Posts. No. 1 stress-rated Southern Pine; No. 1 Douglas Fir; Larch; select, structural Hem-Fir; Mountain Hemlock; Western Hemlock; or sound square edge Red Oaks; seasoned before treatment as required by AWPB Standards; and pressure treated according to AWPB Standards and as follows:

Treatment (Species except Red Oaks)	Retention (kg/m ³)
Ammoniacal Copper Arsenite (ACA)	10
Pentachlorophenol	10
Chromated Copper Arsenate (CCA) Types A, B, or C	10
(Red Oaks)	
Pentachlorophenol	5

Treatment (Species except Red Oaks)	Retention (pounds per cubic foot)
Ammoniacal Copper Arsenite (ACA)	0.60
Pentachlorophenol	0.60
Chromated Copper Arsenate (CCA) Types A, B, or C	0.60
(Red Oaks)	
Pentachlorophenol	0.30

Certify as specified in [Section 106.03\(b\)3](#).

A tolerance of 15 mm (1/2 inch) scant from nominal dimensions is required for the size of posts.

Do not use posts that, for any reason, prevent attachment of guide rail fittings or alignment with other posts.

Throughout the project, use posts treated with the same type of preservative.

2. Steel Posts. [Section 1109](#)

(b) Wood Planks. Seasoned No. 1, structural grade, Long Leaf Yellow Pine; or select, structural grade, Douglas Fir; pressure treated as specified. Certify as specified in [Section 106.03\(b\)3](#).

(c) Class A Cement Concrete. [Section 704](#)

(d) Extruded Aluminum Channel. [Section 1103.02\(a\)](#). The Contractor may use an alternate channel section, of equal or greater section modulus, with suitable dimensions to utilize the mounting hardware. Certify as specified in [Section 106.03\(b\)3](#).

(e) Aluminum Blanks (for Wood Barricade Panels). [Section 1103.04\(a\)](#), Alloy 6061-T6. Certify as specified in [Section 106.03\(b\)3](#).

(f) **Reflective Sheeting.** [Section 1103.04\(c\)](#), Type III or Type IV. Certify as specified in [Section 106.03\(b\)3](#).

(g) **Miscellaneous Material.**

- Aluminum Hardware Items—[Section 1103.11](#)
- Aluminum Round Head Wood or Lag Screws—[Section 1103.11](#)
- Other Hardware Items—[Section 1109.05](#)

(h) **Extruded Aluminum Channel and Aluminum Blank Preparation.** [Section 1103.02\(b\)](#)

678.3 CONSTRUCTION—As shown on the [Standard Drawings](#), using either aluminum channels or wood planks with wood or steel posts.

Apply the reflective sheeting to the aluminum channels as specified in [Section 1103.02\(c\)](#) or to the aluminum blank as specified in [Section 1103.03\(b\)](#).

The post spacing may vary to a maximum of 3 m (10 feet) center-to-center. Mechanically drive posts or erect in concrete footings.

Cut and peen bolts against the faces of nuts.

After erection, treat galvanized components, including the cut ends of bolts, that are abraded or damaged as specified in [Section 620.3\(a\)1](#).

678.4 MEASUREMENT AND PAYMENT—Meter (Linear Foot)