

1728 - EXPANDED FOAM FOUNDATION MATERIAL FOR SIGN POSTS

SECTION 1728

EXPANDED FOAM FOUNDATION MATERIAL FOR SIGN POSTS

1728.1 DESCRIPTION

This specification covers expanded foam backfill used for setting sign posts. The rigid polyurethane foam is shipped in two parts and mixed on site. Soon after mixing the two components, the product expands in volume and conforms to the shape of the excavation. Reaction and cure times vary with component temperature.

1728.2 REQUIREMENTS

- a. Store, handle, and mix according to the manufacturer's instructions.
- b. Provide material complying with **TABLE 1728-1**:

Property	Test Method	Requirement
Shear Strength, min.	ASTM D 732	70 psi
Compressive Strength, min.	ASMT D 1621	165 psi
Density ¹ , min.	ASTM D 1622	8.5 pcf
Tensile Strength ¹ , min.	ASTM D 1623, Type A	150 psi

¹minimum of five test specimens

1728.3 TEST METHODS

Test as specified in **subsection 1728.2b**.

1728.4 PREQUALIFICATION

a. Manufacturers interested in prequalifying material must submit the following to the Bureau of Construction and Materials:

- (1) A complete description, literature, and set of instructions and recommendations,
- (2) A copy of test results performed as outlined in **subsection 1728.2b**,
- (3) Certificate stating results comply with the values outlined in **subsection 1728.2b** and are from tests of material that has essentially the same chemistry and mechanical properties as that submitted for FHWA acceptance,
- (4) A copy of the Federal Highway Administration (FHWA) letter accepting the product as foundation material for use with certain sign post systems,
- (5) Material Safety Data Sheets (MSDS).

b. The Bureau of Construction and Materials will maintain a list of qualified materials. Products will remain on the list as long as field performance is satisfactory.

1728.5 BASIS OF ACCEPTANCE

Prequalification as specified in **subsection 1728.4**.

Receipt and approval of a Type C certification as specified in **DIVISION 2600**.

Receipt and approval of a certification from the manufacturer stating the furnished material has essentially the same chemistry and mechanical properties as that submitted for FHWA acceptance, and complies with the crashworthiness requirements of FHWA and National Cooperative Highway Research Program (NCHRP) Report 350.

Visual inspection by the Field Engineer.