SECTION 919
GROUND TIRE RUBBER
FOR USE IN ASPHALT RUBBER BINDER

919-1 Description.

This Section governs ground tire rubber for use in asphalt rubber binders for use in a variety of paving applications.

919-2 General Requirements.

The ground tire rubber shall be produced from tires and shall be sufficiently dry so as to be free flowing and to prevent foaming when mixed with asphalt cement. The rubber shall be substantially free from contaminants including fabric, metal, mineral, and other non-rubber substances. Up to 4% (by weight of rubber) of talc or other inert dusting agent, may be added to prevent sticking and caking of the particles.

The use of pelletized asphalt rubber is permitted provided the components of the pelletized rubber particles meet the requirements of this Section. Additionally, the pelletized particles must disassociate once blended with asphalt cement.

The ground tire rubber and pelletized rubber used shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6.

919-3 Physical Requirements.

The physical properties of the ground tire rubber shall be determined in accordance with FM 5-559, and shall meet the following requirements:

Specific Gravity	1.02 to 1.20
Moisture Content	Maximum 0.75%
Metal Contaminants	Maximum 0.01%
Gradation	Minimum 98% Passing the No. 30 Sieve

919-4 Chemical Requirements.

The chemical composition of the ground tire rubber shall be determined in accordance with ASTM D297-13 and shall meet the following requirements:

Acetone Extract	Maximum 25%
Rubber Hydrocarbon Content	40 to 60%
Ash Content	Maximum 8%
Carbon Black Content	20 to 40%
Natural Rubber	16 to 45%

919-5 Packaging and Identification Requirements.

The ground tire rubber shall be supplied in moisture resistant packaging such as either disposable bags or other appropriate bulk containers. Each container or bag of ground tire rubber shall be labeled with the manufacturer's designation for the rubber and the specific type, maximum nominal size, weight and manufacturer's batch or LOT designation.

919-6 Certification Requirements.

The Contractor shall provide the Engineer a certification conforming to the requirements of Section 6 from the manufacturer, confirming that the ground tire rubber meets the requirements of this Section.