

SECTION 412

WINTER GRADE ASPHALT PATCHING MIXTURE

412.1-DESCRIPTION:

This work shall consist of preparing a mixture of aggregate and bituminous material suitable for stockpiling and remaining workable for a period of six months.

412.2-MATERIALS:

412.2.1-Bituminous Material: The material shall conform to the requirements of 705.1, Winter Grade Cut-Back Asphalt.

412.2.2-Aggregate: The aggregate shall consist of crushed stone, crushed gravel, or slag, meeting the requirements of 703.1, 703.2 and 703.3 respectively, and sand meeting the requirements of 702.3. The gradation of the final mixture shall be as follows:

<u>SIEVE SIZES</u>	<u>PERCENT PASSING</u>
½ in.(12.5 mm)	100
¾ in. (9.5 mm)	85-100
# 4 (4.75 mm)	25-65
# 8 (2.36 mm)	10-20
# 100 (150 µm)	0-5

CONSTRUCTION METHODS

412.3-MIXING PROPORTIONS:

Samples of bituminous materials and aggregates intended to be used shall be furnished the Division who will advise the mixture proportions to be used.

412.4-PREPARATION OF MIX:

The asphaltic binder shall be heated to 150° to 175° F (66 to 79° C), care being taken to prevent local overheating. The aggregate and bituminous material shall be measured separately and accurately to the proportions in which they are to be mixed. After the aggregate and binder have been combined, they shall be thoroughly mixed until all particles of the aggregate are coated. At no time shall the finished mixture be at a temperature greater than 150° F (66° C).

The constituents shall be combined in such proportions as to produce a

412.5

mixture conforming to the following composition by weight:

	<u>Limestone or Gravel Percent</u>	<u>Slag Percent</u>
Total Mineral Aggregate	94.0-95.0	92.5- 94.0
Winter Grade Cut Back Asphalt	5.0-6.0	6.0-7.5

When the correct percentage of bituminous material is established for a given aggregate, this quantity shall not vary more than minus 0.1 percent or plus 0.3 percent.

412.5-METHOD OF MEASUREMENT:

The quantities of work done will be measured in tons (megagrams) of "Winter Grade Bituminous Patching Mixture", F.O.B. vendor's plant or stockpile, or the Division's stockpile as designated.

The number of tons (megagrams) of "Winter Grade Bituminous Patching Mixture" shall be determined by the total of the weights shown on receipted railroad freight bills when materials are shipped by rail; by actual measured displacement of barges certified by the producer when water shipments are made, providing materials delivered by the methods are not stockpiled or stored; or determined by the Contractor from the total of weigh slips for each vehicle load weighed on an approved standard scale or from digital printout slips from an automatic batching plant, and certified by the Contractor to be correct.

Truck scales shall be provided by the producer or Contractor, except that truck scales are not required where the material is weighed at properly calibrated automatic batching plant facilities which are equipped with digital print-out equipment. The scales shall be of sufficient size and capacity to weigh the heaviest loaded trucks that are used for delivery of the material.

All truck scales shall be mounted on solid foundations which will insure their remaining plumb and level. All truck scales shall be inspected and sealed by the West Virginia Division of Labor, Bureau of Weights and Measures, or other appropriate agencies of the State or its political subdivisions. The Division may, at its option, accept inspection and sealing by out of state agencies when the material is weighed outside West Virginia.

A weigh person shall be provided by the producer. The weigh person shall certify that the weight of the material, as determined either by the truck scales or from the digital printout of the weights, is correct.

Each truck shall be weighed empty prior to each load, except at automatic batch plants approved to operate without truck scales. A digital recorder shall be required on all truck scales. The digital recorder shall produce a printed record of the gross, tare and net weights, and the time, date, truck identification and project number. Provision shall be made for constant zero compensation

and further provision shall be made so that the scales may not be manually manipulated during the printing process. The system shall be interlocked so as to allow printing only when the scale has come to rest. In case of a breakdown of the automatic equipment, the Engineer may permit manual operation for a reasonable time, normally not to exceed 48 hours, while the equipment is being repaired.

412.6-BASIS OF PAYMENT:

The quantity, determined as provided above, will be paid for at the contract unit price bid for the item listed below, which price and payment shall be full compensation for furnishing and handling all the materials incorporated in the mixture.

412.7-PAY ITEM:

ITEM	DESCRIPTION	UNIT
412001-*	WINTER GRADE BITUMINOUS PATCHING MIXTURE,**	TON (MEGAGRAM)

* Sequence number

** Aggregate Type

SECTION 415 REMOVING EXISTING PAVEMENT SURFACE

415.1 - DESCRIPTION:

This work shall consist of preparing the existing pavement for the placement of additional courses of pavement as shown on the plans.

415.2 - CONSTRUCTION METHODS:

The equipment for removing the existing pavement shall be a power operated planing machine or grinder. The equipment shall be capable of accurately establishing profile grades along each edge of the machine within plus or minus 1/4 inch (6 mm) by referencing from the existing pavement and able to maintain accurate depth of cut and cross-slope.

The cuttings shall be expeditiously removed from the pavement behind the planing machine or grinder. Stockpiling of material on the project site will not be permitted unless otherwise noted on the plans or approved by the Engineer.

The machine shall have a control system providing for uniformly varying the depth of cut while the machine is in motion to prevent cutting of or damage to drainage works, manholes or other appurtenances within the paved area.

The existing pavement shall be removed to the depth, width, grade and cross-section shown on the plans or as otherwise directed by the Engineer. The manner of performing the work shall be such that the pavement is not torn, gouged, shoved, broken or otherwise injured and such that the remaining pavement is suitable as a base for a bituminous concrete overlay, or suitable as a riding surface.

The removed pavement material shall become the property of the