

SECTION 430—BITUMINOUS WEARING COURSE FB-2

430.1 DESCRIPTION—This work is construction of a wearing course of plant-mixed bituminous concrete on a prepared surface.

430.2 MATERIAL—[Section 401.2](#), with the following modifications:

(a) **Bituminous Material.** One of the following, at the mixing temperatures shown:

Class of Material	Type of Material	Mixing Temperature °C (F)	
		Minimum	Maximum
PG 64-22	Asphalt Cement	115 (240)	150 (300)
PG 58-28	Asphalt Cement	115 (240)	150 (300)
PG 52-28	Asphalt Cement	115 (240)	150 (300)
PG 46-40	Asphalt Cement	115 (240)	150 (300)
MS-2(E-4)	Emulsified Asphalt	40 (100)	70 (160)
CMS-2(E-5)	Cationic Emulsified Asphalt	40 (100)	70 (160)
SS-1(E-6A)	Emulsified Asphalt	20 (70)	65 (150)
CSS-1(E-6C)	Cationic Emulsified Asphalt	20 (70)	65 (150)
HFMS-2h(E-11-60)	High-Float Emulsified Asphalt	60 (140)	80 (175)
HFMS-2(E-11-90)	High-Float Emulsified Asphalt	60 (140)	80 (175)
HFMS-2S(E-11-150)	High-Float Emulsified Asphalt	60 (140)	80 (175)

(b) **Aggregate.**

- Fine Aggregate—[Section 703.1](#)
- Coarse Aggregate, Type A—[Section 703.2](#)

(e) **Mixture Composition.** Add the following:

When asphalt cement is used, provide a completed bituminous mixture ranging in temperature from 90 °C to 120 °C (200F to 250F).

430.3 CONSTRUCTION—[Section 401.3](#), except as follows:

(c) **Bituminous Mixing Plant.** Equipment for developing the design and control tests according to the Department's modified Marshall method is not required.

Use dry aggregate with all bituminous materials except the Contractor may use damp aggregate with emulsified asphalt. Add 6% to 12% by mass (weight) fine aggregate to the mixture as directed. Use dry-heated course aggregate with asphalt cement. For other bituminous materials requiring dry aggregate, dry the aggregate at a temperature not exceeding 43 °C (110F). Heat the bituminous material to the temperatures specified in [Section 430.2](#).

Add the aggregate and bituminous material to the mixer. Mix the aggregate and bituminous material until the aggregate is thoroughly coated with a film of bituminous material sufficient to provide the required binding properties. Bulletin 27 requirements for mixing time and determining the percentage of aggregate coated do not apply to mixture preparation.

(e) **Bituminous Pavers.** The requirement for a heated unit does not apply to emulsified asphalt bituminous materials.

(g) **Preparation of Existing Surface.** Tack coat requirements apply only when designated in the contract.

(h) **Spreading and Finishing.** When using emulsified asphalt, spread the mixture without stripping the asphalt from the aggregate. Do not place the wearing course until the binder course is satisfactorily cured and at least 24 hours after placing the binder course. When using asphalt cement instead of emulsified asphalt, the 24-hour requirement is waived.

(i) **Compaction.** After uniformly spreading the mixture, allow the mixture to cure until the surface becomes tacky. Compact the mixture using a power roller to a firm, even surface that does not move under the compaction equipment. Intermediate rolling with a pneumatic-tire roller is not required.

(j) **Mat Density Acceptance.** The Representative will accept density when the mixture does not move under the compaction equipment.

(o) **Defective Work.** Revise to read:

Unless otherwise directed in writing by the District Executive, remove and replace pavement deficient in surface tolerance or depth as specified in [Section 401.3](#) or defective in residual asphalt content as specified in [Section 401.2](#).

430.4 MEASUREMENT AND PAYMENT—

(a) **Bituminous Wearing Course FB-2.** Square Meter (Square Yard) or Tonne (Ton)

(b) **Scratch Course.** Tonne (Ton)

(c) **Leveling Course.** Tonne (Ton)