



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
NASHVILLE, TENNESSEE 37243-0348

INSTRUCTIONAL BULLETIN NO. 11-15

Regarding additional Instructions Regarding Computations for Micro-Surfacing

Effective immediately, Section 4-414.05 of the Roadway Design Guidelines is revised to add instructions regarding emulsion application rate.

4-414.05 COMPUTATIONS FOR MICRO-SURFACING

Item No. 414-03.01 Emulsified Asphalt for Micro-Surfacing

0.12 x Below aggregate quantity = Tons

NOTE: Application rate based on 12 percent of the dry weight of the aggregate.

Item No. 414-03.02 Aggregate for Micro-Surfacing

$$\frac{\text{Surface area (Sq. Yd.)} \times \text{XX Lb./ Sq. Yd.}}{2,000 \text{ Lb./ Ton}} = \text{Tons}$$

NOTE: Application rate of 32 pounds (approximate depth 0.375") per square yard shall be used if plans require a leveling mixture (14 pounds per square yard) and a surface mixture (18 pounds per square yard) to be placed, or 22 pounds (approximate depth 0.275") per square yard if only a surface mixture is to be placed, unless otherwise specified.

Item No. 403-01 Bituminous Material for Tack Coat (TC) to be used with Micro-Surfacing

$$\frac{\text{Surface area (Sq. Yd.)} \times \text{*rate (Gal./ Sq. Yd.)}}{231 \text{ Gal./ Sq. Yd.}} = \text{----- Tons}$$

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* Rate 0.10 - 0.15 (Gal./Sq. Yd.) of the diluted emulsion

NOTE: The tack coat shall consist of 1 part emulsion and 3 parts water. The quantity for the emulsion payment, Item No. 403-01, should be 1/4 of the estimated application rate.

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