



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY DESIGN DIVISION**  
SUITE 1200 JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-3848  
(615) 741-2221

JOE GALBATO, III  
INTERIM COMMISSIONER

BILL LEE  
GOVERNOR

**INSTRUCTIONAL BULLETIN NO. 22-07**

**Update to Chapter 7 – Item Numbers  
Regarding Computations for Double Bituminous Surface Treatment (DBST)**

**Effective immediately**, Chapter 7 has been updated to provide Double Bituminous Surface Treatment rates that align with the *TDOT Specifications for Road and Bridge Construction*.

The revised section is shown below:

**7-405.02 COMPUTATIONS FOR DOUBLE BITUMINOUS SURFACE TREATMENT**

**Item No. 405-01.01 Bituminous Material for Double Bituminous Surface Treatment (DBST)**

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

\* Rate 0.30 – 0.38 Gal./ Sq. Yd. (First Application)

\* Rate 0.20 – 0.35 Gal./Sq. Yd. (Second Application)

NOTE: Designers shall assume the mid-point of the rate ranges when calculating quantities. If a different value is used, footnote this item on the estimated roadway quantities sheet in the plans to indicate the rate used. Designers shall show the rate range on the proposed pavement schedule in the plans.

NOTE: See Subsection 405.06 of the *Tennessee Department of Transportation Standard Specifications* for more information regarding the application of Double Bituminous Surface Treatment

**Item No. 405-01.02 Mineral Aggregate for Double Bituminous Surface Treatment (DBST)**

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

\* Rate 24 - 30 Lb./ Sq. Yd. (First Application)

\* Rate 16 – 28 Lb./Sq. Yd. (Second Application)

NOTE: Designers shall assume the mid-point of the rate ranges when calculating quantities. If a different value is used, footnote this item on the estimated roadway quantities sheet in the plans to indicate the rate used. Designers shall show the rate range on the proposed pavement schedule in the plans.

NOTE: See Subsection 405.06 of the *Tennessee Department of Transportation Standard Specifications* for more information regarding the application of Double Bituminous Surface Treatment

  
Jennifer Lloyd, PE  
Civil Engineering Director  
Roadway Design Division

KJL:LHC:WKA  
March 8, 2022