

WSDOT FOP for ASTM D 6931

Standard Test Method for Indirect Tensile (IDT) Strength of Asphalt Mixtures

WSDOT has adopted ASTM D 6931 as published at <http://wwwi.wsdot.wa.gov/MatsLab/BusinessOperations/ASTMLogin.htm> with the following changes:

6. Specimens

6.1 Laboratory-Molded Specimens – Prepare the 150 mm (5.9 in) laboratory-molded specimens in accordance with WSDOT FOP for AASHTO T 312, to a height of 62 ± 1.0 mm (2.44 ± 0.04 in). A minimum of three replicates shall be prepared for each mixture.

6.1.1 Air void (V_a) of test specimen shall be 7.0 ± 1.0 %.

7. Procedure

7.1 Section 7.1 shall be deleted in its entirety.

8. Calculation

8.1 Calculate the IDT strength as follows:

$$S_T = \frac{2F}{3.14 (hd)}$$

Where:

- S_T = Indirect tensile strength (psi)
- F = Total applied vertical load at failure (lbs)
- h = Height of specimen (inches)
- d = Diameter of specimen (inches)

