

**TECHNOLOGY DEPLOYED IN MATC**

# INDIRECT TENSILE ASPHALT CRACKING TEST (IDEAL-CT)

*Determine the cracking potential of your asphalt mixtures*

## HOW IT WORKS




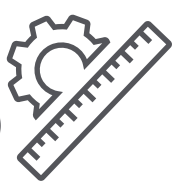




The IDEAL-CT is an indirect tension test that determines the cracking potential of asphalt mixtures with a fracture mechanics-based parameter: Cracking Tolerance Index ( $CT_{Index}$ ). Asphalt mixture specimens are conditioned and fabricated to 150 mm in diameter and 62 mm in height, with  $7.0 \pm 0.5$  percent air voids, no notching/cutting necessary. The test is run at room temperature with a monotonic loading rate of 50 mm/minute of cross-headed displacement.

**The larger the  $CT_{Index}$  value, the better the cracking resistance.**



Image Source: FHWA Load Frame performing Ideal-CT

## IDEAL-CT FEATURES

<p>Highly <b>VERSATILE</b></p> 	<p>Quick Preparation and <b>OPERATION</b></p> 	<p>Field Laboratory <b>ACCESSIBLE</b></p> 
<p>Retrofit for existing load frame <b>COSTS ~ \$4,000</b></p> 	<p>New load frame and equipment <b>COSTS ~ \$12,000</b></p> 	
<p>Tests at least <b>3 REPLICATES</b> for each sample</p> 	<p>Generates a <math>CT_{Index}</math> for each sample in <b>&lt;5 MINUTES</b></p> 	<p>Meets <b>ASTM D8225</b> standards and specifications*</p> 

Current Performance Testing Program Evaluations of IDEAL-CT in: Texas, Oklahoma, Virginia, Kentucky, Minnesota, Maine, Vermont, National Center for Asphalt Technology (NCAT).

**LEARN MORE AT [HTTPS://WWW.FHWA.DOT.GOV/PAVEMENT/ASPHALT/TRAILER/TESTING.CFM](https://www.fhwa.dot.gov/pavement/asphalt/trailer/testing.cfm)**

\* These standards and specifications are not FHWA requirements.