



# Performance Related Specifications for Asphalt Superpave and QC/QA



Widespread use of appropriate tests and specifications for QC/QA of materials that measure and influence the critical properties affecting pavement performance; integrate with materials and pavement design procedures

CONCEPT	RESEARCH	DEVELOPMENT	IMPLEMENTATION
<p><b>SCOPE</b></p> <p>Performance related tests and specifications for use with asphalt pavement of all types</p> <p>Asphalt-Aggregate Mix Analysis System (AAMAS) NCHRP</p> <p>SHRP A-003A</p> <p>AC Long Life Specifications – Asphalt Caltrans, TRB symposium</p> <p>New Construction Quality Database Caltrans METS</p>	Effects of Smoothness on GHG 3.28	CalME v. 1.0	3.37 Additional updating of PRS spec. based on field experience and test improvements
	West Track Pay Factors	CalME v. 2.0	3.37 Training for contractors and owners
	Goal 1 Caltrans Pay Factor Report	3.32 HWTT round robin	3.37 Support LLAC projects - QA testing for Sac-5
	Goal 1 Compaction, PRS tests, pre-CalME ME design method ISAP, 1996 paper & pay factors	3.33 Updates to LLAC approaches and extension to other mixes	3.40 Alternative specimen preparation to remove as much cutting as possible
	Long life asphalt specs for LA-710 mix design, structural design	Define relationship between binder, FAM and mix properties, and test methods and specifications • Fatigue • Rutting • Stiffness • Other properties	Review and update process for setting PRS specification in terms of test variability and contractor requirement to meet specification
	Updates to LLAC specs 2014 – 2016 Teh-5, Sis-5, Sol-80 and design with CalMe 2	3.37 PRS development Simplified PRS procedures Monitoring of previous LLAC projects Pilot projects for using SCB and/or RLT	Support document for contractors and agency labs to get set up for PRS. databases, QC, training, eqpt, etc.
	3.18 Phase 2 review of potential PRS tests for Caltrans SuperPave mix design	3.40 Commercial adoption of PRS tests	Additional standardization of full scale mix and FAM tests for QC/QA
	3.25 PRS for open graded materials, including rubberized	Further improvement of moisture spec. based on field validation (antistrip)	Further improvements in recommendation for appropriate tests based on field experience in different types of projects
	4.42 Evaluation of previous repairs on smoothness	Comparison of smoothness under old and new specifications	PRS for routine projects with different levels of reliability of materials, and new simplified tests
	3.40 Continue review of SCB and RLT as PRS tests for Caltrans SuperPave mix design (the border indicates current project, same applies to others)	Update parameters for HWTT for rubberized mixes	Precision and bias for flexural beam, RLT, simple cracking test, stiffness; continued development of simplified cracking tests, correlated with fatigue SCB and IDEAL tests with new parameters
Use of image analysis in cracking tests to look at strain fields	Continued development of FAM as a PRS mix test	Implementation of NCHRP 9-62 in place recycling research	
	Low temperature crack tests for PRS for binder, instead of just current rheological properties	PaveM follow up on PRS projects	