# PMI

## Central Mix Rubberized Emulsion Aggregate Slurry (REAS)

## Performance Specification-09/22/11

**Description:**

**This work shall consist of placing central mix REAS mixture on a pavement surface. The central mix contains all of the ingredients, aggregate, asphalt emulsion, ground crumb rubber, water, additives and set control agents, and is manufactured as defined by the mix design.**

**Mix Design:**

**At least seven (7) days before slurry seal placement commences, PMI shall submit to the agency for approval a laboratory report of tests and proposed mix design covering the specific materials to be used on the Project. The tests and mix design shall be performed by a laboratory capable of performing the applicable International Slurry Seal Association (ISSA) tests. The crumb rubber must be ground rubber made from whole tire recycling of California tires only. Verification of the amount of ground rubber used can be confirm by purchase receipts from California whole tire recycler suppliers. The proposed slurry seal mixture shall conform to the requirements specified when tested in accordance with the following tests:**

| Tests | ISSA Test | Requirements |
|---|---|---|
| Slurry Seal Consistency, mm | TB 106 | 40 max. |
| Wet Stripping | TB 114 | Pass |
| Wet Track Abrasion, $g/m^2$, 1 hour soak | TB 100 | 800 max. |
| Wet Track Abrasion, $g/m^2$, 6 day soak | TB 100 | Report |

**Once the job mix recommendation has been established by the mix design, this slurry should be subjected to the following performance criteria for Type II & III:**

| Tests | ISSA Test | Requirement |
|---|---|---|
| Measurement of Stability & Resistance of Compaction, Vertical & Lateral Displacement of Multilayered Fine Aggregate Mixes | TB 147 | Lateral x% max.<br>Tackiness Observation |

**Proportioning Through Central Mix Plant:**

**Aggregate, emulsion, water and additives including set-control agents used shall be proportioned by weight utilizing the mix design approved by the Engineer. The tank shall be equipped with load cells and a full sweep agitator capable of producing a homogeneous slurry mix.**

**Central Mix Laydown:**

**All storage tanks and delivery vehicles shall be equipped with an agitator. At least 2 operational spreader trucks shall be available at the job site during the spreading operation. Rotating and reciprocating equipment on spreader trucks shall be covered with metal guards.**

**The REAS shall be delivered to the slurry site and spread directly behind trucks with mechanical-type squeegee distributors.**

**Placing:**

**The slurry mixture shall be uniformly spread on the existing surface within the rate specified without spotting, rehandling or otherwise shifting of the mixture.**

**The slurry seal shall not be placed when the atmospheric temperature is below 55°F or during unsuitable weather.**

**Before placing the slurry seal, the pavement surface shall be cleaned by sweeping, flushing or other means necessary to remove all loose particles of all dirt and other extraneous materials.**

**Longitudinal joints shall correspond with the edges of existing traffic lanes. Other patterns of longitudinal joints may be permitted, if the patterns will not adversely affect the quality of the finished product, as determined by PMI & agency.**

**Through traffic lanes shall be spread in full lane width units only. Longitudinal joints common to 2 traffic lanes shall be butt joints with overlaps not to exceed 3 inches. Building paper shall be placed at transverse joints over any previously placed slurry seal or other suitable methods shall be used to avoid double placement of slurry seal. Hand tools shall be available in order to remove spillage. Ridges or bumps in the finished surface will not be permitted.**

**The mixture shall be uniform and homogeneous after spreading on the existing surfacing and shall not show separation of the emulsion and aggregate after setting.**

**Adequate means shall be provided to protect the slurry from damage by traffic until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to and/or be picked up by the tires of vehicles.**

**Measurement:**

**Slurry seal will be measured by the ton. The weight of the central mix REAS slurry will be determined from certified weighmaster certificates.**

**Slurry Seal Performance Warrantee:**

**An extended slurry seal performance warrantee, up to 5 years, may be available from PMI. This extended performance warrantee must be a mutually agreed to by PMI and agency in job selection, performance acceptance requirements and other aspects.**

**Payment:**

**The contract price paid per ton for slurry seal shall include full compensation for furnishing all labor, materials, tools equipment and incidentals, and for doing all the work involved in constructing the slurry seal, complete in place, including testing for and furnishing the mix design, cleaning the surface, furnishing added water and set-control additives.**