##### Tack Coat Special Provisions

*The following are written as Special Provisions added to, or replacing, the respective provisions in the 2018 Caltrans Standard Specifications, or the 2018 or 2021Standard Specifications for Public Works Construction.*

##### 2018 Caltrans Standard Specifications:

**Add the following to section 39-2.01B(10):**

*A Certificate of Compliance shall be submitted to the Engineer for each truckload of asphaltic emulsion or asphalt binder to be used as tack coat material before the start of application. The Engineer may obtain and retain samples for testing.*

**Replace the 9th paragraph of 39-2.01C(3)(f) with:**

If authorized, you may change tack coat rates.

**Add the following to section 39-2.01C(3)(f):**

*The full-width of the surface to receive tack coat shall be cleaned with a self-propelled, truck-mounted sweeper equipped with both power brooms and a vacuum system to remove loose dirt, sand, dust, and other objectionable material. The surface to be treated shall be dry after cleaning and immediately prior to tack coat application.*

*The distributor truck spray bar shall be pressurized during application and discharge tack coat material in a fan shape from each nozzle. The spray bar shall be set at a height above the existing pavement which results in each interior spray fan overlapping a minimum of twice before coming into contact with the pavement. Streaking or streaked applications will not be accepted.*

*Tack coat shall be applied only as far in advance of the placing of the overlying layer as required for that day's operation. Following application, tack coat shall be allowed to cure without being disturbed for the period of time necessary to permit setting. Treated surfaces shall be protected from damage until the succeeding course of pavement is placed.*

##### 2018 or 2021 Standard Specifications for Public Works Construction.

***Replace 302-5.4 Tack Coat with the following:***

***302-5.4 Tack Coat****. Tack coat material shall be uniformly applied to the surface of the existing pavement immediately prior to the placement of asphalt concrete (including a succeeding lift when constructing in multiple courses). The contact surfaces of cold pavement joints, curbs, gutters, manholes, and other structures or facilities to be joined shall also be painted with tack coat material immediately prior to the adjoining asphalt concrete being placed.*

*Tack coat material shall be PG 64-10 paving asphalt conforming to 203-1 or SS-1h emulsified asphalt conforming to 203-3. SS-1h emulsified asphalt shall not be diluted beyond a ratio of 1 part water to 1 part original emulsified asphalt (1:1). A Certificate of Compliance for each truckload of emulsified asphalt or paving asphalt shall be provided to the Engineer before the application of tack coat starts. The Engineer may obtain and retain samples for testing.*

 *The full-width of the surface to receive tack coat shall be cleaned with a self-propelled, truck-mounted sweeper equipped with both power brooms and a vacuum system. Loose dirt, sand, dust, and other objectionable material shall be fully removed. The surface to be treated shall be dry after cleaning and immediately prior to tack coat application.*

 *The minimum rate of application of SS-1h emulsified asphalt shall be that shown in Table 302-5.4 (A), or the application rate necessary for the minimum residual rate shown in Table 302-5.4 (B), whichever is greater. For PG 64-10 paving asphalt, the application rate shall be a minimum of the residual rate shown in Table 302-5.4B. Table 302-5.4 (B) is applicable to both SS-1h emulsified asphalt and PG 64-10 paving asphalt.*

**TABLE 302-5.4 (A)**

|  |  |
| --- | --- |
| **Surface Type** | **Minimum Application (Spray) Rate (gal/yd2)**  |
| **Undiluted (Original) Emulsified Asphalt (SS-1h)** | **Diluted (1:1) Emulsified Asphalt** **(SS-1h)** |
| Asphalt Concrete | 0.05 | 0.10 |
| Cold milled or Micro-Milled Asphalt Concrete | 0.09 | 0.18 |
| New Asphalt Concrete (Between Successive Lifts) | 0.04 | 0.08 |
| Portland Cement Concrete | 0.05 | 0.10 |

**TABLE 302-5.4 (B)**

|  |  |
| --- | --- |
| **Surface Type** | **Minimum Residual Rate (gal/yd2)1**  |
| **Emulsified Asphalt (SS-1h)** | **Paving Asphalt (PG 64-10)** |
| Asphalt Concrete | 0.03 | 0.03 |
| Cold milled or Micro-Milled Asphalt Concrete | 0.05 | 0.04 |
| New Asphalt Concrete (Between Successive Lifts) | 0.02 | 0.02 |
| Portland Cement Concrete | 0.03 | 0.03 |

1. Tack coat application rates shall be based upon the volume of asphalt remaining per square yard after application (residual rate). For SS-1h, this is the volume remaining after the asphalt emulsion has broken and not water remains. For PG 64-10, this is the volume on the roadway immediately after application.

 *Tack coat material shall be applied by a distributor truck conforming to 302-2.3. The distributor truck spray bar shall be pressurized during application and discharge tack coat material in a fan shape from each nozzle. The spray bar shall be set at a height above the existing pavement which results in each interior spray fan overlapping a minimum of twice before coming into contact with the underlying pavement. Streaking or streaked applications will not be accepted.*

 *Tack coat shall be applied only as far in advance of the placing of the overlying layer as required for that day's operation. Following application, tack coat shall be allowed to cure without being disturbed for the period of time necessary to permit setting. Treated surfaces shall be protected from damage until the succeeding course of pavement is placed.*