



SECTION 407

TACK COAT

407.1 Description. This work shall consist of preparing and treating an existing bituminous or concrete surface with bituminous material, and blotter material if required, in accordance with these specifications, as shown on the plans or as directed by the engineer.

407.2 Material. All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Emulsified Asphalt (SS-1, SS-1H, CSS-1 or CSS-1H)	1015

407.3 Equipment. The contractor may provide a system for heating and applying the bituminous material and for applying blotter material. The system shall be designed, equipped, maintained and operated such that liquid asphalt at even heat may be applied uniformly on variable widths of surface up to 15 feet (4.5 m) at readily determined and controlled rates from 0.02 to 1.00 gallon per square yard (0.1 to 4.6 L/m²), with uniform pressure, and with an allowable variation from any specified rate not to exceed 0.02 gallon per square yard (0.1 L/m²). The system shall include a calibrated tank and a thermometer for measuring temperature of tank contents. The system shall be equipped with instrumentation that continuously verifies application rates. The calibration of the system shall be approved by the engineer prior to use, and the contractor shall furnish all equipment, material and assistance necessary if calibration is required.

407.4 Construction Requirements.

407.4.1 Preparation of Surface. The existing surface shall be free of all dust, loose material, grease or other foreign material at the time the tack is applied. Any excess bituminous surface mixture or bituminous joint material will be removed by MoDOT without cost to the contractor before the tack is applied.

407.4.2 Application. Asphalt emulsion shall be applied uniformly with a pressure distributor at the rate specified in the contract or as revised by the engineer to be within a minimum of 0.02 gallon per square yard (0.1 L/m²) and a maximum of 0.10 gallon per square yard (0.45 L/m²). Water may be added to the asphalt emulsion and mixed therewith in such a proportion that the resulting mixture will contain no more than 50 percent of added water. The contractor shall notify the engineer of the exact quantity of added water. The application of the resulting mixture shall be such that the original emulsion will be spread at the specified rate. The asphalt emulsion shall be heated at the time of application to a temperature in accordance with [Sec 1015](#). The tack shall be properly cured and the tacked surface shall be cleaned of all dirt and surplus sand before the next course is placed.

407.4.2.1 Tack. The tack coat shall be applied in such a manner as to cause the least inconvenience to traffic and to permit one-way traffic without tracking of the asphalt emulsion. All exposed tack coat shall be covered with sand or bituminous mixture prior to opening to traffic. Limestone or Dolomite sands shall not be used.

407.5 Method of Measurement. Measurement of asphalt emulsion to the nearest 10 gallons (50 L) will be made as specified in [Sec 1015](#). If water is added to asphalt emulsion, the quantity to be paid for will be determined prior to the addition of water.

407.6 Basis of Payment. The accepted quantity of tack coat will be paid for at the contract unit price. No direct payment will be made for water added to the asphalt emulsion or for sand necessary for blotting.