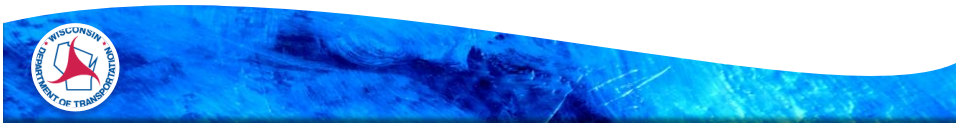


# Tack Coat

## Session 5



## Tack Coats

Emulsions = Asphalt + Water + Emulsifiers

Example:

CSS1-h

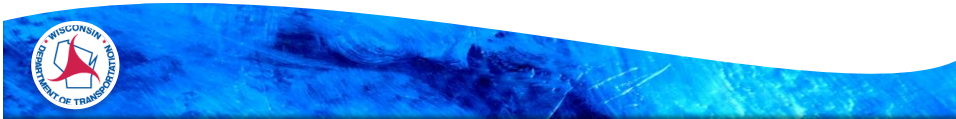
C-cationic (positive charge)

S-slow (can be rapid or medium)

S-set

1-viscosity related (1 or 2)

h-hardness of PG binder

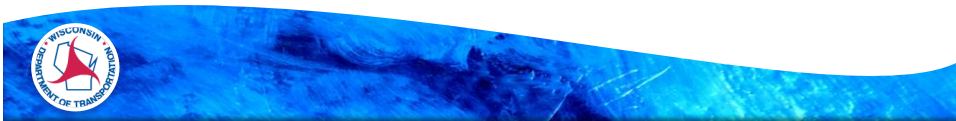


## WisDOT Standard Specification 450

- ▶ Maintaining Work
  - Maintain during all construction stages until final or partial acceptance
  - Protect and repair the prepared foundation, tack coat, base, paved traffic lanes, shoulders, and seal coat
  - Correct all rich or bleeding areas, breaks, raveled spots, or other nonconforming areas in the paved surface

Field Inspection

Visual (Document Findings)



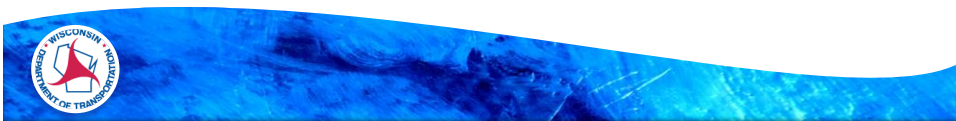
## WisDOT Standard Specification 455

- ▶ Tack Coat
  - Under the Tack Coat bid item, furnish type MS-2, SS-1, SS-1h, CSS-1, CSS-1h, or modified emulsified asphalt, unless the contract specifies otherwise.

Field Inspection

Visual (Document Findings)

Sample Accordingly (Get copy of BOL)



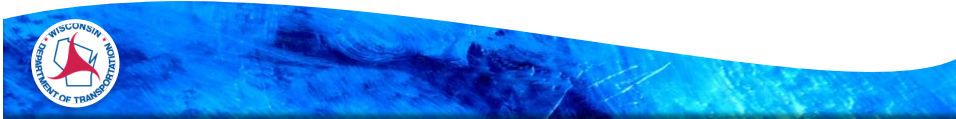
## WisDOT Standard Specification 455

### ► Tack Coat

- Heat the tack material without burning.
- Provide a tachometer, pressure gauges, and accurate volume measuring devices or a calibrated tank.
- Also provide a thermometer for measuring the temperature of the tank contents.
- Apply tack coat when air temperature is 32 F or more.

Field Inspection

Visual and/or verify calculations & temperature (Document Findings)



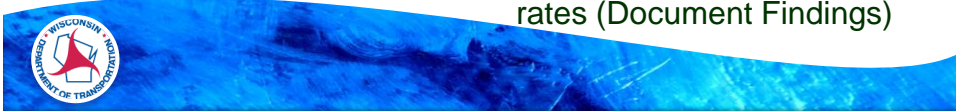
## WisDOT Standard Specification 455

### ► Tack Coat

- Obtain engineer's approval for application rate (0.050 to 0.070 gallons per square yard after dilution).
- Contractor must show that as-placed material has 50% or more residual asphalt content.
- Correct under application by applying additional material.
- If contractor cannot maintain application rate within tolerance, discontinue operations and make necessary corrections.

Field Inspection

Visual and/or verify calculations/  
rates (Document Findings)



## WisDOT Standard Specification 455

### ► Tack Coat

- Measure by ton or gallon based on shipment net weights
- Payment
  - Basis of payment full compensation
  - If PG binder is nonconforming, pay at 75% if material remains in place
  - If tack is nonconforming see pay table
  - For any nonconforming nuclear density or QMP HMA material items both mix and PG binder prices are affected

Field Inspection

Visual and/or verify calculations  
(Document Findings)



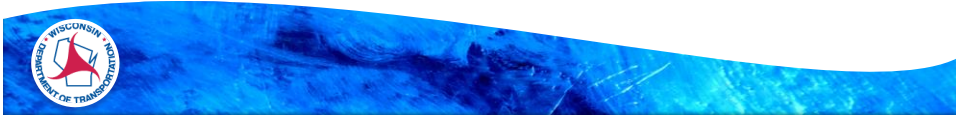
## WisDOT Standard Specification 455

### ► Tack Coat

- Spray parallel to road centerline
- Do not operate with clogged nozzles
- Protect structures to prevent spatter or marring by tack operations including concrete not being resurfaced
- Maintain tack during all stages of construction until final or partial acceptance
- Correct areas of excess or deficient tack and areas where bond might be affected

Field Inspection

Visual (Document Findings)

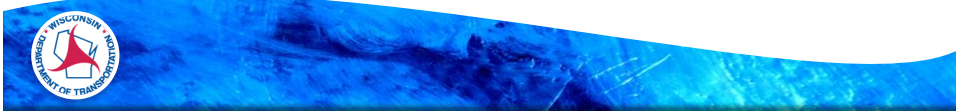


## WisDOT Standard Specification 455

### ► Tack Coat

- Spray bar details
- Provide a hose and spray nozzle to apply tack to areas inaccessible to the spray bar.
- Immediately before applying tack material, sweep existing surfaces to remove dust, dirt, or other objectionable material.
- Place in a single application, distribute uniformly (determine width based on traffic and construction).

Field Inspection      Visual    (Document Findings)



## Tack coat application











