

WisDOT - Tack Coat Specs

Date Supplied to NRRRA: August 10, 2016
Supplied by: Steve Hefel, P.E.
HMA Supervisor
Bureau of Technical Services
Wisconsin Department of Transportation
3502 Kinsman Blvd, Madison, WI 53704
608-246-7934 office
608-572-0891 cell
Steven.Hefel@dot.wi.gov

Link below is to WisDOT Standard Specifications
<http://wisconsindot.gov/rdwy/stndspec/ss-04-55.pdf#ss455>

Specific application rate portion of the spec to result in a residual of 0.025 to 0.035 gal/sy

455.3.2 Tack Coat

455.3.2.1 General

Revise 455.3.2.1(1) to allow tack coat application down to 32 degrees F. This change was implemented in ASP 6 effective with the January 2015 letting.

(1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.

Revise 455.3.2.1(2) to require 50% asphalt content and raise the tack coat application rate to 0.050 - 0.070 gal/SY. This change was implemented in ASP 6 effective with the December 2014 letting.

(2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as received

from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

(3) Unless the contract specifies otherwise, keep the road open to all traffic during the work. Plan and prosecute tacking operations to adequately provide for traffic without damaging the work.

Longitudinal Joint Treatment

No specifications for LJ. No testing within 1' of the edge

Performance Testing

Draft resulting from high recycle pilot projects

460.2.5.2.2 Performance Testing Requirements

The following performance tests are required when binder replacement exceeds 20%. The tests shall be conducted one per 20,000 tons and each time a JMF change is made. Test procedures shall be in accordance with CMM 8-36.

- (1) Hamburg Wheel Track (HWT) Test– Conduct the test at 46°C and the number of passes indicated in the following table:

<u>Mix Type</u>	<u># of passes</u>
2 or 3 LT	15,000 passes
2 or 3 MT	15,000 passes
4 or 5 LT, MT	5,000 passes

- (2) Disk-Shaped Compact Tension Test

- A minimum fracture energy of 400 J/m² is required for unaged LT mix specimens
- A minimum fracture energy of 450 J/m² is required for unaged MT & HT mix specimens
- ~~- In addition to unaged specimens, aged specimens are required for all mixes with modified~~

~~binders~~

If the above test requirements are not met, stop production. An investigation shall be conducted to determine the source of the problem and the appropriate corrective action shall be taken to resolve the issue. If the problem cannot be properly identified and corrected, the mixture shall be replaced with a standard mix containing <20% binder replacement and meeting the above test requirements.