

MAINTENANCE PLANNING GUIDELINES

2006

ACTIVITY: Chip Sealing (R31C)
MINOR (Only)

ACTION: Chip Sealing
A. Course Aggregate (LM)

DEFINITION: The time and expenses incurred for spot or continuous seals using either hand or bar application of bituminous material and covering with aggregate material either by hand, tailgate or spreader. This includes course aggregate chip seals & fine aggregate chip seals.

PURPOSE: To seal out surface moisture on cracked or deteriorating asphaltic surfaces, extend pavement life, and improve skid resistance.

SCHEDULING: As needed during warm weather with the bulk prior to October 15.

J	F	M	A	M	J	J	A	S	O	N	D
A	E	A	P	A	U	U	U	E	C	O	E
N	B	R	R	Y	N	L	G	P	T	V	C

- RECOMMENDED EQUIPMENT:**
- Asphalt Distributor
 - Dump Trucks w/Spreaders or Chip Spreaders
 - Pneumatic Roller(s)
 - Broom/Sweeper
 - Traffic Control Equipment (See EPG [616.23 Traffic Control for Field Operations](#))

- RECOMMENDED MATERIAL:**
- Liquid Binder – Sealing Grades
- Check with Materials Office for proper selection of aggregate. (½-in.- 3/16-in.) Aggregate size.

RECOMMENDED PROCEDURE:

1. Consult with Materials Office and vendor for design and application rates.
2. Place traffic control devices as required.
3. Sweep the existing surface to clean and remove loose debris.
4. Set temporary pavement marking.
5. Check application rate for distribution of aggregate and binder depending on field specific conditions. Adjust as necessary for each job.
6. Roll immediately.
7. Excess aggregate should be swept off and removed when surface is cured.
8. Remove traffic control devices, except the “No Center Stripe,” “Fresh Oil” and “Loose Gravel” signs.
9. “Fresh Oil” and “Loose Gravel” signs should remain in place until surface is cured and loose aggregate has been thoroughly swept off.

SAFETY: Care should be taken to reduce the amount of loose aggregate. Motorists should be warned to drive slowly and watch for fresh asphalt and moving equipment. Refer to [Safety Policies, Rules & Regulations – Employee Handbook](#).

OTHER CONSIDERATIONS: May substitute lightweight aggregate to minimize vehicle damage claims. Use a pneumatic roller to improve rock retention by asphalt. It is advisable to hold a traffic control planning session prior to projects.

REFERENCES: *Missouri Standard Specifications for Highway Construction;* Sections [409](#), [1003](#), [1015](#). Also see [EPG 409 Seal Coat](#).

R31C – Chip Sealing – Course Aggregate



(1) MO 45 Haydite Chip Seal Distributor



(2) Distributor



(3) MO 45 Haydite Chip Seal



(4) MO 45 Haydite Chip Seal



(5) MO 45 Haydite Chip Seal



(6) MO 45 Haydite Chip Seal



(7) MO 45 Haydite Chip Seal



(8) D1 Distributor



(9) D1 Chipper



(10) D1 Pneumatic Roller



(11) D1 Finished Product



(12) D9 Distributor



(13) D9 Distributor



(14) D9 Chipper



(15) D9 Chipper



(16) D9 Sweeper



(17) D9 Pneumatic Roller