

CEMP-ET  Engineer Technical Letter 1110-3-497	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	ETL 1110-3-497  24 February 1999
	Engineering and Design  PRIME COATS FOR ASPHALT PAVEMENTS	
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Technical Letter  
No. 1110-3-497

24 February 1999

Engineering and Design  
PRIME COATS FOR ASPHALT PAVEMENTS

1. Purpose. This Engineer Technical Letter (ETL) provides guidance and clarification on the need for asphalt pavement prime coats.
2. Applicability. This letter is applicable to all HQUSACE elements and USACE commands having military construction and design responsibility. The criteria in this ETL supersede all criteria in all existing manuals and guide specifications insofar as need for the use of prime coat.
3. References.
  - a. ER 1110-345-100, "Design Policy for Military Construction."
  - b. TM 5-822-8/AFM 88-6, Chap. 9, July 1987, "Bituminous Pavements Standard Practice."
  - c. TM 5-825-2/AFM 88-6, Chap. 2/DM 21.3, Aug 1978, "Flexible Pavement Design For Airfields."
  - d. CEGS 02748, "Bituminous Tack and Prime Coats."
4. Distribution. Approved for public release; distribution is unlimited.
5. Background. Existing construction and engineering criteria concerning whether or not to use a prime coat has been ambiguous and conflicting. This ETL provides guidance and clarification on the use of prime coats.
6. Action.
  - a. Pending publication of revised technical manuals and guide specifications, the following paragraphs are to be incorporated into CEGS 02748 Bituminous Tack and Prime Coats and used as guidance for design.
    - (1) Prime coats are required if it will be at least seven days before a surface layer is constructed on the underlying compacted material. The type of liquid asphalt and application rate will depend on the grading of the underlying material, and shall be as specified in this specification section. This will be paid for as described in the Bid Schedule.

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(2) The Contractor shall protect the underlying layer (base course, etc.) from any damage (water, traffic, etc.) until the surfacing is placed. If the Contractor places surfacing within seven days, the choice of protection measures or actions to be taken is at the Contractor's option. If damage or deterioration occurs, corrections shall be made in accordance with subparagraph (4) below.

(3) Prime coats shall be applied as soon as possible after consolidation of the underlying material. All traffic, except for paving equipment used in constructing the surfacing, shall be prevented from using the underlying material, whether primed or not, until the surfacing is completed.

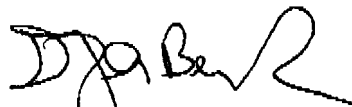
(4) Damage to the underlying material caused by lack of, or inadequate, protection shall be repaired (recompacted or replaced) by approved methods at no additional cost to the Government.

(5) Prime coat shall conform to all requirements of this specification section,

b, The criteria in TM 5-822-8 regarding the proper selection and application of prime coat is still in effect and should be used, except that drainage layers do not require prime coats unless there is a need to protect the underlying material from moisture, such as expansive subgrade soils etc.

7. Implementation. This letter will have routine application for all future military projects as defined in paragraph SC, ER 1110-345-100.

FOR THE COMMANDER:



DWIGHT A. BERANEK, P.E.  
Chief, Engineering and Construction Division  
Directorate of Military Programs