

1405 - LIQUID MEMBRANE FORMING COMPOUNDS

SECTION 1405

LIQUID MEMBRANE FORMING COMPOUNDS

1405.1 DESCRIPTION

This specification covers liquid membrane forming compounds (also referred to as concrete curing compounds) suitable for spraying on horizontal and vertical concrete surfaces to retard the loss of water during the early hardening period and subsequent curing period.

1405.2 REQUIREMENTS

a. Provide liquid membrane forming compound that complies with AASHTO M 148 for Type 1-D, clear or translucent with fugitive dye, or Type 2, white pigmented compound.

b. Type 2 white pigmented compound will be further classified into Type 2 (Wax Based) and Type 2 (Other). This is to allow specifying of wax based compound for certain applications where a bond breaker is desired. Either formulation base may be supplied except when wax based is specified.

c. Do not allow water-emulsion based material to freeze. Material that has been subjected to freezing temperatures will be rejected.

1405.3 TEST METHODS

Test materials in accordance with AASHTO M 148. Fingerprinting and screening of verification samples by infrared spectroscopy is done according to ASTM E 1252.

Water emulsion based material is not subject to the long term settling test by the freeze thaw cycling method.

Wax-based material for Cement Treated Base (CTB) with the following exceptions:

Moisture Loss, kg/sq m (max.)	0.60
Reflectance (min.).....	50%

1405.4 PREQUALIFICATION

Submit a 1-quart sample of material and a copy of the manufacturer's test results on samples of the same lot of material to the Engineer of Tests. Include a copy of the Material Safety Data Sheet (MSDS). For Type 2 white pigmented compounds, include a statement regarding whether the formulation is wax based or other, unless it is specifically addressed in the MSDS.

Samples will be tested for compliance with this specification. The manufacturer will be notified of the test results on the samples submitted.

Results of tests from the AASHTO National Transportation Product Evaluation Program (NTPEP) will be accepted in lieu of the sample requested above. Include the most recent NTPEP test report along with the other documentation requested. Include evidence that the product being offered is identical to the one reported in the NTPEP report.

Manufacturers whose products comply with this specification will be placed on a prequalified list. Manufacturers will remain on the list as long as the results of verification samples and performance in the field are satisfactory. Any changes in formulation will require re-submittal for prequalification testing.

Verification samples will be taken by each District at the rate of 2 per product, per manufacturer, per year, of the manufacturers supplying to that District. Samples will be forwarded to the Materials and Research Center for verification testing.

1405.5 BASIS OF ACCEPTANCE

Prequalification as required by **subsection 1405.4** above.

Receipt and approval of a Type C certification as specified in **DIVISION 2600**.