

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
CONTRACT ADMINISTRATION DIVISION - MATERIALS SECTION  
MATERIALS PROCEDURE

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ZINC RICH LOW VOC SYSTEM

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- 1.0 PURPOSE
- 1.1 To establish a procedure for approval of zinc rich low VOC systems, and to set forth procedures for sampling, testing, and shipping said products.
- 2.0 SCOPE
- 2.1 This procedure shall apply to all manufacturers who furnish zinc rich low VOC systems to the Division.
- 3.0 APPLICABLE DOCUMENTS
- 3.1 WVDOT/DOH Standard Specifications for Roads and Bridges.
- 3.2 MP 711.00.20 - Paint Testing Methods
- 3.3 ASTM D3925 - Sampling Liquid Paints and Related Pigment Coatings
- 4.0 PREREQUISITES FOR CERTIFICATION
- 4.1 The manufacturer shall submit to the Division of Highways:
  - 4.1.1 A one quart (one liter) sample of primer, formulated to meet the requirements of sub-section 711.22.2 of the Standard Specifications for Roads and Bridges.
  - 4.1.2 A one quart (one liter) sample of intermediate coat (if part of the system), formulated to meet the requirements of sub-section 711.22.3 of the Standard specifications for Roads and Bridges.
  - 4.1.3 A one quart (one liter) sample of top coat, formulated to meet the requirements of sub-section 711.22.4. The color of the topcoat shall be one of those specified in sub-section 711.20.4 of the Standard Specifications for Roads and Bridges.

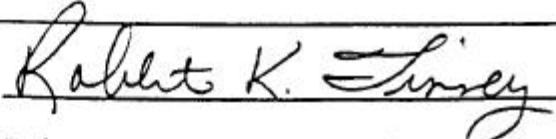
- 4.1.4 The samples should be sent to:

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CONTRACT ADMINISTRATION DIVISION - MATERIALS SECTION**  
312 MICHIGAN AVENUE  
CHARLESTON, WEST VIRGINIA 25311

- 4.1.5 A one quart(one-liter) container of thinner should accompany the sample for each product, along with product data sheets and material safety data sheets for each.
- 4.1.6 Each color or shade of topcoat shall constitute a separate formulation for sampling.
- 4.2 Testing of the paint system shall be performed in the Division of Highways laboratory. The Division will provide the manufacturer the results of the testing. If the results are satisfactory, an individual approval number will be assigned for each low VOC system.
- 5.0 SAMPLING AND TESTING
- 5.1 The Division will take samples of the components of each approved system at periodic intervals and tested for specification compliance. Sampling frequency will be dependent upon the historical compliance of the material with the specifications. The minimum frequency will be every two years.
- 5.1.1 Sampling shall be conducted in accordance with ASTM D3925.
- 5.1.2 The Division reserves the right of pull monitor samples from the job site for testing to verify conformance with the specification requirements.
- 5.2 Tests shall be conducted in accordance with Materials Procedure 711.00.20.
- 5.2.1 If the test data indicates that the material does not meet the requirements, an investigation shall be conducted to determine the cause of failure of the samples. This investigation shall include, but not be limited to, a review of the manufacturer's quality control test records and may involve re-testing by the Division.

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- 5.2.2 Two consecutive failing samples tested by the Division shall be cause to remove the system from the certified list. Before a system can be considered for re-approval, the manufacturer shall provide data, which demonstrates that the cause of failure has been found and corrected.
- 5.3 The manufacturer may have material sampled by the Division and tested on a batch-by-batch basis in accordance with the requirements of Section 5.2.
- 5.4 When the quantity of material is 50 gallons (200 liters) or less, the Division may elect to accept the material based on certified test data from the manufacturer.
- 6.0 PROCEDURES FOR SHIPPING
- 6.1 The manufacturer shall include the following information on each shipping document: name and location of the company, type of material, quantity, date shipped, current product or batch approval number (issued by Contract Administration Division - Materials Section), batch number, and date of manufacture.
- 6.1 The shipping document shall accompany the system to its final destination and a copy of the shipping document shall be submitted to the Division of Highways at the address shown in sub-section 4.1.4 of this Materials Procedure.

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Robert K. Tinney, Director  
Contract Administration Division

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