



**Iowa Department of Transportation**

SPECIAL PROVISIONS  
FOR  
HIGH-BUILD WATERBORNE TRAFFIC PAINT

Linn County

STP-U-1187(690)--70-57

Effective Date

November 17, 2009

THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SERIES OF 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS. THESE ARE SPECIAL PROVISIONS AND SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS

## PART I GENERAL REQUIREMENTS

This part consists of the general provisions necessary when furnishing and installing High-Build, Waterborne Traffic Paint complete, in place as described in the project plans and these special provisions.

### 1.1 RELATED SPECIFICATIONS AND STANDARDS

Unless otherwise specified in the project plans and special provisions the traffic paint installed under this specification shall comply with:

- A. Latest series of the Standard Specifications of the Iowa Department of Transportation, Section 2527, Pavement Marking.
- B. Federal Specification TT-P-1952E.
- C. ASTM E1743, Retroreflectivity
- D. ASTM D3960, Volatile Content
- E. ASTM D711, Laboratory Dry Time
- F. Federal Color Standards 595b
- G. Manual on Uniform Traffic Control Devices (MUTCD).

All work shall conform to Section 2527 of the Standard Specifications except as modified by this special provision.

### 1.2 MEASUREMENT AND PAYMENT

- A. Method of Measurement
  - 1. Per Standard Specification 2527.05.
- B. Basis of Payment
  - 1. Per Standard Specification 2527.06.

## PART II MATERIAL REQUIREMENTS

2.1 High-Build Durable Waterborne Traffic Paint shall meet Federal Standard TT-P-1952E, Type III. The material shall have the following minimum properties:

- A. Color: White: Color Chip 37925, Federal Standard 595b  
Yellow: Color Chip 33538, Federal Standard 595b
- B. Viscosity at 77 deg. F: 83-98 Krebs Units
- C. Grind (Hegman Gage), Min. 3
- D. Laboratory Dry Time, ASTM D 711

- @ 15 wet mils, minutes, max. 10
- @ 25 wet mils, minutes, max. 25
- E. Dry Through Time, minutes, max. 150
- F. Flexibility: No cracking or flaking when tested per TT-P-1952B.
- G. Water Resistance: Conform to TT-P-1952B.
- H. Freeze-Thaw and Heat Stability: No coagulation or change greater than 10 Kreb Units when tested per TT-P-1952B.
- I. Dilution Test: The paint shall be capable of dilution with water at all levels without curdling or precipitation such that the wet paint can be readily cleaned with water only.
- J. Bleeding: The paint shall have a minimum bleeding ratio of 0.97 when tested in accordance with TT-P-1952B. The asphalt saturated felt shall conform to ASTM D 226 for Type I.
- K. Lead Content: <3200 ppm, dry weight basis
- L. Chromium Content: <800 ppm, dry weight basis

### PART III INSTALLATION REQUIREMENTS

#### 3.1 GENERAL

Installation procedures, conditions, and requirements shall be in conformance with Section 2527.03 of the Standard Specifications, except as modified below:

- A. Paint shall be applied at a thickness of 20 mils (wet). This rate should yield 22 Gal. per mile of 4" line.
- B. Temperatures: Application of High-Build paint shall not be at atmospheric and surface temperatures less than 50 degrees F nor greater than 150 degrees F.