



**SPECIAL PROVISIONS  
FOR  
HIGH-BUILD WATERBORNE TRAFFIC PAINT**

**Linn County  
NHSX-U-922-0(23)--8S-57**

**Effective Date  
December 15, 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: Per Standard Specification 2527.05.
- B. Basis of Payment: 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.