

**KANSAS DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION TO THE  
STANDARD SPECIFICATIONS, EDITION 2015**

Delete SECTION 1729 and replace with the following:

**SECTION 1729**

**ANTI-GRAFFITI COATING**

**1729.1 DESCRIPTION**

This specification covers anti-graffiti coatings, which are coatings applied to substrates to facilitate the removal of graffiti.

**1729.2 REQUIREMENTS**

**a. General.**

(1) Anti-graffiti coatings must not react deleteriously with above grade concrete, concrete block, exposed aggregate concrete, brick, stonework, painted steel, or aluminum substrates.

(2) The applied coating must produce a firm, continuous, uniform film that is free of pinholes, cracks, or other film defects and exhibit satisfactory adhesion. The consistency must be such that the coating can be satisfactorily applied by spray, roller, or brush at atmospheric and material temperatures above 50°F without thinning. When applied properly to vertical surfaces, the coating must remain uniform during the required curing period and must not sag, disintegrate, check, peel, or crack.

(3) The VOC content of the coating must comply with the current national rule for industrial maintenance coatings.

**b. Specific.** In addition to the general requirements of **subsection 1729.2a**, the coating must meet the requirements of Type II or Type III.

(1) Type II - Permanent. Type II coatings are chemically resistant coatings that allow removal of the graffiti with solvent or chemical graffiti removers. The use of graffiti removers, solvents, or both must not cause damage or pigment loss.

The color must match Federal Standard 595B, color number 35630 unless otherwise shown in the Contract Documents. When the Contract Documents specify another color, the color must match the color standard supplied by the Engineer. The Contract Documents may specify clear or translucent as a color.

Provide material complying with the requirements listed in **TABLE 1729-1**.

<b>TABLE 1729-1: REQUIREMENTS FOR TYPE II COATINGS</b>		
<b>Property</b>	<b>Test Method</b>	<b>Requirement</b>
Graffiti Resistance	ASTM D6578	Cleanability Level 8, 9, or 10
Recleanability	ASTM D6578	Min. 5 cycles
Fluid Resistance	ASTM D1308 <sup>a</sup>	No blistering, discoloration, softening or adhesion loss
Set-to-Touch Time	ASTM D1640 <sup>b</sup>	4 hr. maximum
Dry-Through Time	ASTM D1640 <sup>b</sup>	24 hr. maximum

<sup>a</sup> Spot Test using Paint Thinner and Gasoline

<sup>b</sup> 3-mil wet film tested at 77°F.

(2) Type III – Permanent, Water Cleanable. Type III coatings allow for the removal of the graffiti with a high-pressure cold water wash. Coatings must be self-recoatable for the life of the coating.

The color must match Federal Standard 595B, color number 35630, unless otherwise shown in the Contract Documents. When the Contract Documents specify another color, the color must match the color standard supplied by the Engineer. The Contract Documents may specify clear or translucent as a color.

Provide material complying with the requirements listed in **TABLE 1729-2**.

<b>TABLE 1729-2: REQUIREMENTS FOR TYPE III COATINGS</b>		
<b>Property</b>	<b>Test Method</b>	<b>Requirement</b>
Graffiti Resistance	ASTM D7089	Cleanability Levels 1 & 2
Recleanability	ASTM D7089	Min. 5 cycles
Set-to-Touch Time	ASTM D1640 <sup>a</sup>	4 hr. maximum
Dry-Through Time	ASTM D1640 <sup>a</sup>	24 hr. maximum

<sup>a</sup> 3-mil wet film tested at 77°F.

### 1729.3 TEST METHODS

Test in accordance with the requirements stated in **subsection 1729.2**.

### 1729.4 PREQUALIFICATION

**a.** Each anti-graffiti coating intended for use under this specification must be prequalified before use. Submit a written request for prequalification to the Bureau Chief of Construction and Materials. Provide the following documentation:

- (1) Name, address, and telephone number of the manufacturer. Include the name and e-mail address of the preferred contact person.
- (2) Brand name of the anti-graffiti coating.
- (3) A complete description, literature, and set of instructions for removal of graffiti.
- (4) Material Safety Data Sheets.

**b.** Submit a one gallon sample from production and detailed installation instructions to the Engineer of Tests. All coatings will be tested in accordance with **subsection 1729.2**, and will be fingerprinted using infrared spectroscopy for use in screening future verification samples to verify that materials submitted for use are of an identical formulation as originally approved.

**c.** The information, test reports and test results obtained at the Materials and Research Center on samples submitted, will be reviewed by the Bureau Chief of Construction and Materials. The manufacturer will be advised of the results.

**d.** The Bureau of Construction and Materials will maintain a list of prequalified products. Products that have been prequalified will remain prequalified as long as the formulation and manufacturing processes remain unchanged, and field experience indicates that the anti-graffiti coating functions appropriately. Changes in formulation or manufacturing processes will require new prequalification testing.

Failure of the material to function appropriately in the field will be cause for removal of the product from prequalified status. Products removed from prequalified status will be considered for requalification if the manufacturer can provide evidence that the cause of failure has been positively identified, and necessary formulation changes and/or quality control measures have been implemented to prevent future failures. Complete prequalification testing may be required for products that have been removed from prequalified status.

### 1729.5 BASIS OF ACCEPTANCE

Prequalification as specified in **subsection 1729.4**.

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