

**RESPONSES 2 COMMENTS RECEIVED FROM INDUSTRY REVIEW**

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Bob Dion

File: 5230000.D04 – Patterned/Textured Pavement  
Username: Bob Dion  
UserEmail: bob\_dion@urscorp.com  
UserTel: 386-740-0665  
Date: Thursday, June 16, 2005  
Time: 12:13:56 PM

Comments:

523-4, 2nd sentence, mentions 'ornamental trees within the asphalt area'. Should this be removed? Would any trees be allowed in the asphalt area?

**Response:** No Change. This spec could be applied in non-traffic areas such as medians and sidewalk areas where trees may be present. The same provision is included in 526 Architectural Pavers.

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Glyn Owen

File 5230000.D04 – Patterned/Textured Pavement  
Username: GLYN OWEN  
UserEmail: glyn.owen@jarvis-usa.com  
UserTel: 1 678 904 0800  
Date: Wednesday, June 29, 2005  
Time: 03:51:54 PM

Comments:

One of the key benefits of Imprint is the that the color is throughout the material and never wears off thus maintaining color consistency for the life of the product which could be 20 years. The reason for clients using Imprint in many cases is because they have experienced color wearing off other systems prematurely. There is no requirement in this specification for the maintenance of color so in theory after three years the print could be there and the skid resistance but the color could be different to what was originally installed. Wouldn't it be a requirement of the state to have a surface taht is the same color after three years as the color originally specified?

With the state spending considerable money on textured paving products three years is a very short time frame for a product to last before it being considered to be out of specification. Three years is a very short time and so would a 5 year time frame be a more worthwhile life expectancy of products that the public will

see visbly and once deteriorated want replacing? Replacing textured paving every three years is going to be very expensive to the state. If products can last three years then another two shouldn't be a problem should it?

**Response:**

1. Color requirement. A performance requirement is being added to 523-2.2 to require that wearing of the material coating shall expose no more than 15% of the underlying surface area after 3 years.

2. 5 year time frame vs. 3 year time frame. No change. At this time we consider the 3 year requirement is realistic for the various products currently available and will provide for a reasonable level of competition among vendors.

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Matthew Schindler

File: 5230000.D04 – Patterned/Textured Pavement  
Username: Matthew Schindler  
UserEmail: road.work@mindspring.com  
UserTel: 813 649 1336  
Date: Thursday, June 30, 2005  
Time: 03:44:47 PM

Comments:

Comment for Specification Change 523 Patterned Textured Pavement

523-1: Change the following: "1. Imprinting patterns into existing or new pavement and covering with a surface coating(s) of NON-REFLECTIVE paint or thermoplastic."

Change the following: "3. Colored, preprinted, preformed textured NON-REFLECTIVE thermoplastic material that is applied over existing pavement."

Change the following: "4. Colored, NON-REFLECTIVE thermoplastic material that can be imprinted and textured during or after application to existing OR NEW pavement."

Most people think of thermoplastic as being reflective, but MUTCD does not permit reflective colored pavement surfaces (unless they are being used for traffic control purposed)

523-2.2: Theoretically, a surface applied coating (color) could wear off but as long as the indented print remains it would be considered a "pass". Therefore, change the following: "1. the imprint must be maintain a depth of 50% of the original installed depth and width AND MAINTAIN THE PATTERN'S GEOMETRIC ACCURACY. IN THE CASE OF APPLIED COLORED COATING, THE COATING SHALL NOT HAVE FADED OR WORN OFF THE PAVEMENT."

Suggest that the field evaluation include at least one turn lane as part of the evaluation area. Suggest changing the performance measure from 3 years to 5 years.

**Response:**

1. 523-1. No change. Section 523-2.1 specifies that requirements for Reflectivity do not apply. It is not necessary to repeat this in 523-1.
2. 523-2.2. A performance requirement is being added to 523-2.2 to require that wearing of the material coating shall expose no more than 15% of the underlying surface area after 3 years. Regarding geometric accuracy, there will be no change at this time, since there is currently no established method for measuring geometric accuracy of the various patterns.
3. Adding turn lane as part of evaluation. No change. The ADT per lane requirements is based on the same requirements used for pavement markings and should be sufficient to evaluate wear performance.
4. 5 year time frame vs. 3 year time frame. No change. At this time we consider the 3 year requirement is realistic for the various products currently available and will provide for a reasonable level of competition among vendors.

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Randy Wilson

File: 5230000.D04 – Patterned/Textured Pavement  
 Username: Randy Wilson  
 UserEmail: randywilson3@comcast.net  
 UserTel941-350-0978  
 Date: Friday, July 01, 2005  
 Time: 09:33:41 AM

Comments:

QPL list should state any manufacturer's limitations on the product such as ADT limits so contractors can take this into consideration when bidding.

**Response:** No change. In accordance with Section 523-2.2 all patterned textured pavement products will be subjected to a field service test on a roadway carrying 8000 to 12000 vehicles per day PER LANE. This is the same ADT requirements as being used for pavement markings.

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Tonii Brush

File: 5230000.D04 – Patterned/Textured Pavement

Username: Tonii Brush  
UserTel: 386-943-5348  
Date: Tuesday, June 21, 2005  
Time: 10:05:44 AM

Comments:

Couldn't this item be plan quantity instead of measured? This item is used in specific areas outlined in the plans and usually don't change much in the field.

**Response: Agree. Section 523-4 will be changed accordingly.**

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Charles Holzschuher

**COMMENT FOR 523-2.2 Paragraph Numbered 1.:**

I agree wear should be considered, but how do we measure 50% wear? Sounds like a subjective rating, that may be hard to quantify. Will the District make this determination after 3 years? The rigid pavement condition survey handbook (from Pavement materials section) on p. 19 describes the following distress that may be applicable: The manual discusses **Surface Deterioration** and is described as having popouts, raveling, scaling, and disintegration. Levels of distresses are described as **moderate** when some of the aggregate is exposed and **Severe** when most of the aggregate is exposed and some has been removed.

**An idea for 2.2.1 would be to field check QPL test sections for any patterned textured pavement having moderate surface deterioration distresses greater than 15%. Distresses could be quantified by reporting percentages of the exposed roadway surface. Anything greater than 15% would be considered failing. This would be based on a visual survey for a 3 year period.**

**Response: There is nothing in 2.2 paragraph 1 regarding 50% wear. It specifies that the imprint must maintain 50% of the original installed depth and width, which should not be a problem to measure.**

Agree with comments regarding surface deterioration. A performance requirement is being added to 523-2.2 to require that wearing of the material coating shall expose no more than 15% of the underlying surface area after 3 years.

**COMMENT FOR 523-2.2 First Paragraph after Paragraph Numbered 2.:**

Why not a minimum ADT instead of a range? Would a section of 16,000 AADT

one way not be considered?

**Response:** No change. The ADT requirements are based on the same requirements used for pavement markings.

Charles Holzschuher, P.E.  
Friction and Nondestructive Testing  
State Materials Office

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