

**FaSTRACK™**  
ROAD MARKING TECHNOLOGY

## ADDRESSING COOL-WEATHER STRIPING CONCERNS

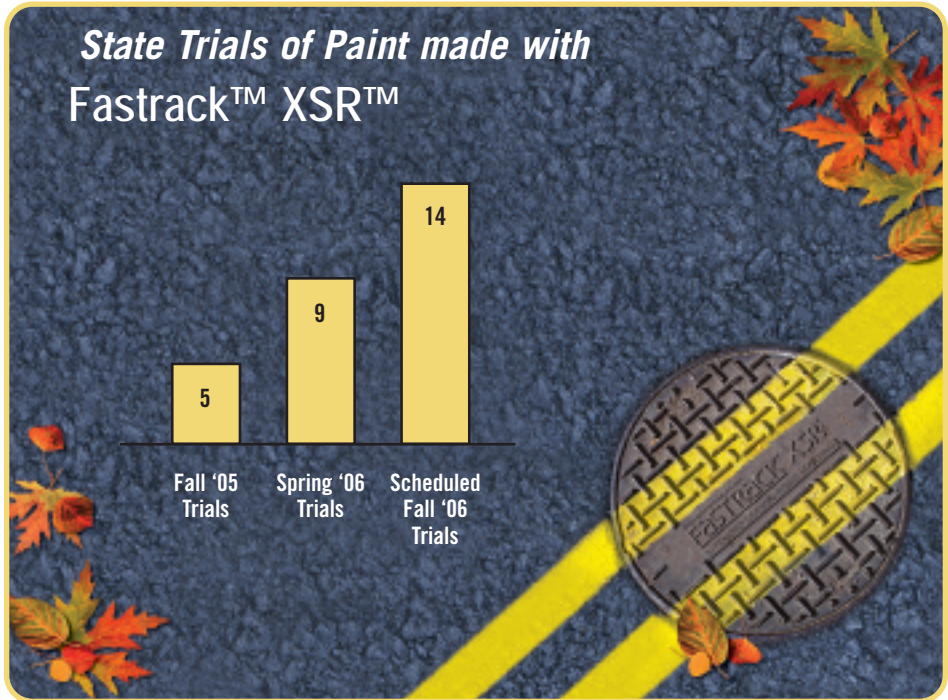
Cool Spring and Fall temperatures are often an obstacle to roadway striping, affecting the durability of waterborne traffic paint. During these shoulder seasons, waterborne traffic paint may not dry properly and may lose the performance characteristics so important for driver safety. As a result, contractors may be forced to suspend striping operations or look for marking alternatives.

To address cool weather issues and to extend the window of application, a new waterborne resin has been developed by Rohm and Haas—Fastrack™ XSR™ emulsion polymer (X-tended Seasonal Range).

At application temperatures from 35°F (1°C) and rising, paints based on Fastrack XSR resin dry rapidly, reducing or eliminating the tracking problems that are so prevalent in cooler weather. They provide good low-temperature durability, retain retroreflectivity, and offer good roadway delineation. Paints based on Fastrack XSR resin also improve adhesion to oily surfaces and provide better flexibility for adhesion to crack seal material.

For additional information about extending the striping season with Fastrack XSR-based paints, contact Rohm and Haas or talk with your traffic paint supplier.

### State Trials of Paint made with Fastrack™ XSR™



In addition to the state trials mentioned above, paints based on Fastrack XSR have been trialed on two **cool temperature test decks** and in four **Canadian provinces**.

## FASTRACK™ XSR™ SHINES IN NTPEP DEBUT

With the introduction of Fastrack™ XSR™ resin well underway, interest in road trials and test deck applications has increased dramatically. To effectively evaluate the unique low-temperature performance of paints made with Fastrack XSR resin, roadway application must be done during the cooler temperatures that typically occur during early and late season striping. The graphic above shows the number of test decks and trials in the U.S. In addition to these, trials have been conducted in four Canadian provinces.

AASHTO (American Association of State Highway and Transportation Officials) has been sponsoring, and Rohm and Haas Company has been participating in, NTPEP (National Transportation Evaluation Program) test decks since 1995. Suppliers apply their pavement marking products to asphalt and concrete transverse test decks and provide performance information to State Transportation Departments. *(Continued on back, See [SHINES](#))*

(SHINES, continued from front)

Working with David Kuniega of PennDOT, NTPEP coordinator for the 2005 Pennsylvania test decks, Rohm and Haas Company conducted a study of the effects of several variables on NTPEP test deck pavement marking performance. The study took place on the Interstate 80 deck near Lock Haven, PA. Variables included substrate type, time of application, range of allowable film thickness, glass bead type, paint type, and season of application (application conditions).

The entire study will be analyzed later in 2006. The information presented here highlights the effects of **paint type** and **season of application** on the performance of the NTPEP test lines.

The “summer application” was applied in July 2005 and the “fall application” in November 2005. From the readings taken in May of 2006, the importance of paint type and season of application were already strikingly apparent:

### Retroreflectance (mcd) of 15 wet mil white paints with dual coated glass beads on the 2005 NTPEP Interstate 80 (Pennsylvania) asphalt test deck:

Retro Readings Taken:	Standard WB Paint Applied In:		Fastrack™ XSR™ WB Paint Applied In:	
	July 2005	Nov 2005	July 2005	Nov 2005
<b>Skip Line Area:</b>				
July 2005	411		430	
Nov 2005	398	392	406	429
May 2006	<b>279</b>	<b>160</b>	308	<b>275</b>
<b>Wheel Track Area:</b>				
July 2005	416		530	
Nov 2005	289	383	349	480
May 2006	108	32	141	100

Retroreflectance of a standard waterborne paint was significantly reduced when applied in early November at the very end of the striping season (May 2006 skip line area retro = **160** for lines applied in November 2005 vs retro = **279** for lines applied in July 2005). However, waterborne paints applied in early November that were based on Fastrack XSR resin maintained a level of retro-reflectance (May 2006 skip line area retro = **275**) equal to that of the standard waterborne paint applied in July.

Air and road temperatures for the early November application were in the low 50s. Road tests at lower temperatures have shown that waterborne paints based on the newest Fastrack XSR technology can be applied when air and road temperatures are in the mid 30s to low 40s and rising and that they maintain a level of performance that is expected from standard waterborne paints applied at much higher temperatures.

The results of the November NTPEP trials illustrate the effectiveness of this X-tended Seasonal Range resin

## FASTRACK™ PRODUCT LINE

Fastrack™ XSR™ resin joins an ever growing line of waterborne polymer technology advancements for creating pavement marking applications:

### Fastrack™ XSR™ Resin

Low temperature application for extending the striping season.

### Fastrack™ HD21A Resin

100% acrylic crosslinking polymer for higher build (higher film thickness), higher durability waterborne markings.

### Fastrack™ 3427 Resin

Second generation fast dry waterborne.

### Fastrack™ 2706 Resin

1st generation fast dry waterborne.

### Cool Resin Introduced at ATSSA 2006



Rohm and Haas introduced Fastrack XSR resin at ATSSA 2006 in Fort Lauderdale, Florida. The new cool weather resin was also the focus of interest at ATSSA's New Products Press Conference. On hand from Rohm and Haas for the introduction—from left to right: Cindy Randazzo, Technical Service Group Leader; John Holz, Field Trial Specialist; and Tom Winterberg, Field Trial Specialist.

For additional information, contact your Rohm and Haas representative; call toll free at 1-866-626-5611; or e-mail us at [Fastrack@rohmmaas.com](mailto:Fastrack@rohmmaas.com).

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