



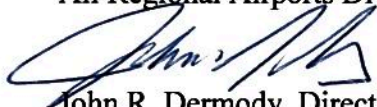
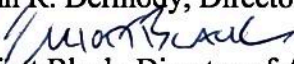
# Federal Aviation Administration

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## Memorandum

Date: JAN 06 2017

To: All Regional Airports Division Managers

From:  John R. Dermody, Director of Airport Safety and Standards, AAS-1  
 Elliott Black, Director of Airport Planning and Programming, APP-1

Subject: Preformed Thermoplastic Airport Pavement Markings

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This memorandum clarifies the guidance regarding the use of Preformed Thermoplastic Markings (PTM) issued on August 9, 2016. These recommendations will be re-evaluated upon completion of the paint durability study currently underway by the FAA's Office of Aviation Research, Airport Technology Research and Development Branch.

When supported by a life cycle cost analysis, as outlined in FAA Order 5100-38, Airport Improvement Program Handbook, projects funded with Airport Improvement Program (AIP) or Passenger Facility Charges (PFC) funds may include the use of PTM at the following locations:

- Surface Painted Hold Sign Markings;
- Taxiway Direction and Location Markings;
- Geographic Position Markings;
- Vehicular Roadway Markings on Airfield;
- Zipper Lines, and
- Taxiway Edge Lines.

When using PTM particular attention should be paid to surface preparation, application of sealer and timely application of heat in accordance with the manufacturer application guidelines.

**Background**

The FAA has been studying the use of PTM since 2006 and markings have been installed at over 188 locations since that time. In general the PTM markings have performed well, however some locations have experienced localized premature performance issues primarily related to de-bonding to portland cement concrete pavement (PCCP) and/or distortion under aircraft tires while turning. At all locations that experienced performance issues, the manufacturer has been able to successfully complete warranty repairs or replace the marking with a different marking material.

At some locations PTM markings have been distorted and or displaced under tires and required remedial repairs. Airports should monitor the performance of existing PTM installed at:

- hold lines;
- enhanced taxiway centerlines;
- near high speed exits;
- at locations where multiple aircraft sit idling, or
- where sharp nose gear turns are executed.

The current performance issues relate to material not performing as long as anticipated in the life cycle cost analysis, not that the material does not provide markings that provide the visual guidance intended. The performance of any airport markings is dependent upon many factors including: surface condition and preparation prior to application of marking, weather conditions at time of application, proper application methods by the installer, amount and nature of traffic on markings. No airport marking will perform without proper surface preparation, proper materials and proper installation means and methods.

If you have any questions, please contact: Doug Johnson at (202) 267-4689 or by email at [Doug.Johnson@faa.gov](mailto:Doug.Johnson@faa.gov).