



U.S. Department  
of Transportation  
Federal Aviation  
Administration

# Advisory Circular

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**Subject:** Hot Mix Asphalt Paving  
Handbook

**Date:** 9/27/2013

**AC No:** 150/5370-14B

**Initiated by:** AAS-100

Change:

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## 1. What is the purpose of this advisory circular (AC)?

This AC provides general guidance on asphalt paving operations. The Hot-Mix Asphalt Paving Handbook 2000 (handbook) is in Appendix 1 of this AC. The handbook concentrates on field practices for asphalt paving, including plant operations, transportation of materials, surface preparation, laydown, compaction, and quality control processes.

Developed under the sponsorship of the National Asphalt Pavement Association (NAPA), the American Association of State Highway and Transportation Officials (AASHTO), Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), US Army Corps of Engineers (USACE), American Public Works Association (APWA), and the National Association of County Engineers (NACE), this handbook promotes a common understanding among those involved in asphalt paving, resulting in improved construction.

## 2. Does this AC cancel any prior ACs?

This AC cancels AC 150/5370-14A, Hot Mix Asphalt Paving Handbook, dated July 24, 2001.

## 3. To whom does this AC apply?

The handbook provides government and contractor personnel with a comprehensive view of asphalt paving. The guidelines and recommendations contained in this AC are provided by the FAA as guidance only and are not binding or regulatory.

## 4. What is the purpose of this revision?

This AC is a reissuance of the “Hot-Mix Asphalt Paving Handbook 2000.” The information presented in the handbook is still valid and, although most of the information can be found in other documents, the bulk of the information in the handbook remains useful for airport operators. The handbook is unaltered.

The users of this handbook should note the following points when applying it to FAA airport projects:

- The handbook was written for use by a wide audience and is not specific to airport paving operations. Some of the information presented may not agree with current FAA specifications; however the essence of the information is still valid. Refer to other FAA ACs such as AC 150/5320-6, Airport Pavement Design and Evaluation and AC

150/5370-10, Standards for Specifying Construction of Airports for current specifications requirements.

- Chapter 2, Project Organization, is generic and not specific to any one agency or organization. As stated in the preface to the document, “The handbook is not intended to cover administration, contracting procedures, site investigation, geometric design, structural design, or mix design, although some general information is included concerning contract administration and mix design. Therefore, existing agency policies and procedures will have precedence in these areas.”
- HMA paving in an airport environment presents its own unique set of safety issues over and above personnel safety discussed in the “Safety” paragraph in Chapter 2. Refer to AC 150/5370-2, Operational Safety on Airports During Construction for additional guidance on airport safety requirements.
- Chapters 8 and 9, Batch Plants and Parallel Flow Drum-mix Plants, respectively, and Table 8-1, Required Aggregate Temperatures, discuss reclaimed asphalt pavement (RAP) and indicate allowable amounts up to 50 percent. The FAA limits RAP to 30 percent in Items P-401 and P-403 in AC 150/5370-10.
- Chapter 11, Surge and Storage Silos and Truck-Loading Techniques, includes excessive storage times of 2-3 days in some cases. These storage times exceed FAA Items P-401 and P-403 specifications in AC 150/5370-10.
- Chapter 14, Surface Preparation, presents cutback asphalt (MC-30/70) as typical for prime coats, but today’s contractors commonly use an asphalt emulsion. The ranges stated in this chapter for prime and tack coat application rates vary from current FAA specifications.
- Chapter 17, Joint Construction, discusses tapered joints (both transverse and longitudinal), wedge joints, etc. FAA specifications require cutting back of all longitudinal cold joints. FAA does not recommend the use of wedge joints to construct longitudinal joints on airfields.

## **5. Are there any related documents?**

Airfield Asphalt Pavement Technology Program (AAPTTP) Project 05-01, Airfield Asphalt Pavement Construction Best Practices Manual, dated December 2008, provides a good companion document to the handbook and is specific to airport pavement construction. This manual is written for both FAA and Department of Defense (DoD) users among others, so most of the information on specification requirements is general, but within range of current FAA specifications. It discusses best practices for construction of HMA mixtures including all aspects of controlling mixture quality during construction such as stockpiling, mix design, plant operations, trucking, placement, compaction, and quality control/quality assurance testing. The intended audience is the inspector, technician, designer, and contractor personnel involved in construction and quality control testing as well as the foreman and superintendent. This and other AAPTTP reports are available at the following website: <http://www.aaptt.us/>.

**6. Where can I send comments or suggestions?**

Send comments or suggestions for improving this AC to:

Manager, Airport Engineering Division  
Federal Aviation Administration  
800 Independence Avenue SW  
Washington DC 20591

**7. How can I get this and other FAA publications?**

You can view a list of all ACs at [http://www.faa.gov/regulations\\_policies/faa\\_regulations/](http://www.faa.gov/regulations_policies/faa_regulations/).

A handwritten signature in black ink, appearing to read "Michael J. O'Donnell", is written over a light gray rectangular background.

**Michael J. O'Donnell**

Director of Airport Safety and Standards

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