

FAA Specifications & Technical Updates



AC 150/5370
Standards for
Specifying
Construction of Airports



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**U.S. Department
of Transportation**
Federal Aviation
Administration

Advisory Circular

Subject: Standard Specifications for
Construction of Airports

Date: Draft

AC No: 150/5370-10H

Initiated By: AAS-100

Change:

November 2, 2017

Dear Industry Representative:

We are requesting your review of Draft Advisory Circular AC 150/5370-10H, “Standard Specifications for Construction of Airports,” which is available on http://www.faa.gov/airports/resources/draft_advisory_circulars/. Paragraph 6 of the cover page lists the principal changes with a brief explanation for the change. We will consider comments received by **December 22, 2017**, for inclusion in the AC.

Note: We have extended the comment deadline to **January 19, 2018**.

Subject: Standard Specifications for
Construction of Airports

Date: Draft

Initiated By: AAS-100

AC No: 150/5370-10H

Change:

Principal Changes.

This AC contains the following changes:

20. P-401: Placed material properties in table format; clarified JMF submittal requirements; removed paragraph on testing facilities and placed guidance in Section C-100, Contractor Quality Control Program (CQCP); added paragraph identifying smoothness equipment requirements; added paragraph “Smoothness for Contractor Quality Control;” added paragraph “Profilograph smoothness for QA Acceptance” clarifying that final profilograph is on the full length of the project; added use of the Asphalt Pavement Analyzer (APA) to Item P-401 eliminating the need to run stability and flow when using the Marshall Method and allowing the same asphalt design criteria in Table 1 to apply regardless of which mix design method is selected, Marshall or Gyratory.



Figure 2: Comparison of a rut-resistant HMA (left) and a rut-susceptible HMA (right) after 8,000 load cycles in the APA.

Asphalt Pavement Analyzer (APA)

Designed for rut proof testing and field quality control in the mid 1980s.

8,000 cycles using a 100 lb. load and 100 psi hose pressure.

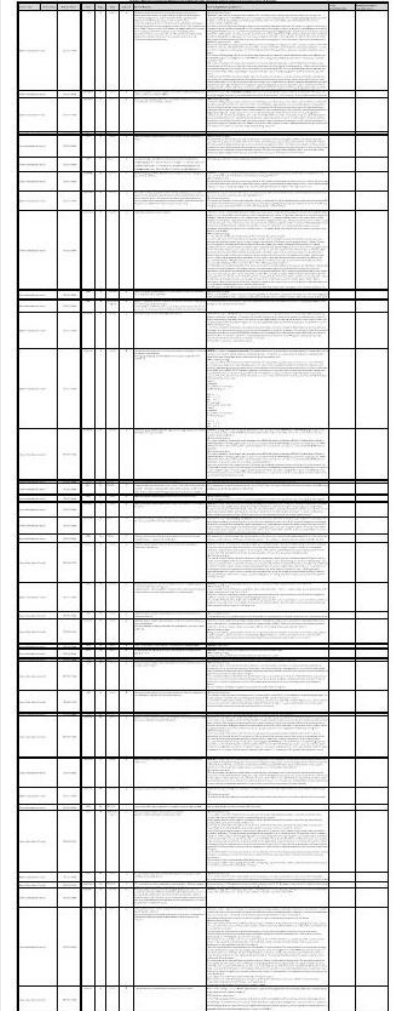
Outline

- Introduction
- FAA Specifications Draft update: AC 150/5370-10H
 - Reason for update
 - Notable revisions
 - Notable comments from Airports Consultant Council/Others
 - Discussion on Colorado Preferences

Specification Update – Why?

- Reason for update
 - Routine updates occur on Advisory Circulars based on feedback
 - Current update has a significant focus on emphasizing quality control
- More than 1500 comments received as of January
- Expected out by end of fiscal year

*ACC Comment
example – Page
1 of 10*



The image shows a vertical stack of 10 small document thumbnails, each representing a page of an ACC comment example. The thumbnails are arranged in a grid with 10 rows and 2 columns. Each thumbnail contains a page of text, likely a comment or a page from a document, with some text highlighted in red. The thumbnails are arranged in a grid with 10 rows and 2 columns. Each thumbnail contains a page of text, likely a comment or a page from a document, with some text highlighted in red.

Notable revisions/Comment - Aggregates

- Aggregates
 - Standardized Straight Edge – 12'
 - “Control Sections” Required
 - Others?
 - Separate pay item for QC
- ACC Comments
 - Recommending adding minimum CBR values for each material
 - P-154 – Offering stockpile gradation testing vs in-place



Notable revisions- P-401 – Mix

- 50 Blow/Gyrations Mix deleted
- Flow and Stability replaced with Asphalt Pavement Analyzer
- Binders
 - Grade bumping added for low traffic areas
 - Grade bumping only required in top 5”

Notable revisions- P-401 – Methods/Acceptance

- Minimum lift thickness 4 x aggregate size (aggregate size where 10% retained) – **2” Minimum**
- Joint preparation – Allows joint heaters
- Intermediate QC required for smoothness – ¼ Inch
- Removes upper compaction limits
- Others?



*Photo credit –
Tim Burke
Photography*

Notable ACC comments- P-401

- 50 Blow/Gyrations Mix
 - May still be needed under 60,000 lbs
- Flow and Stability – keep for Marshall
- Materials – define “detrimental pavement staining” (pyrite etc.)
- Is Asphalt Pavement Analyzer available?
- Improve TSR testing criteria
- Keep upper compaction limits
 - Could lead to bleeding distresses

Cold in Place Recycling - Update

- Meadowlake?
- *2017 - Buchanan Field – Northern California*
 - *Reliever – 100,000 Operations – (Similar to BJC)*
 - *2006 Cold-In Place Recycle of Primary Runway*
 - *Airport currently pursuing similar model on Cross-Wind Runway*

