Forum
Archival Facilities Guidelines

SAA Annual Meeting
July 27, 2017

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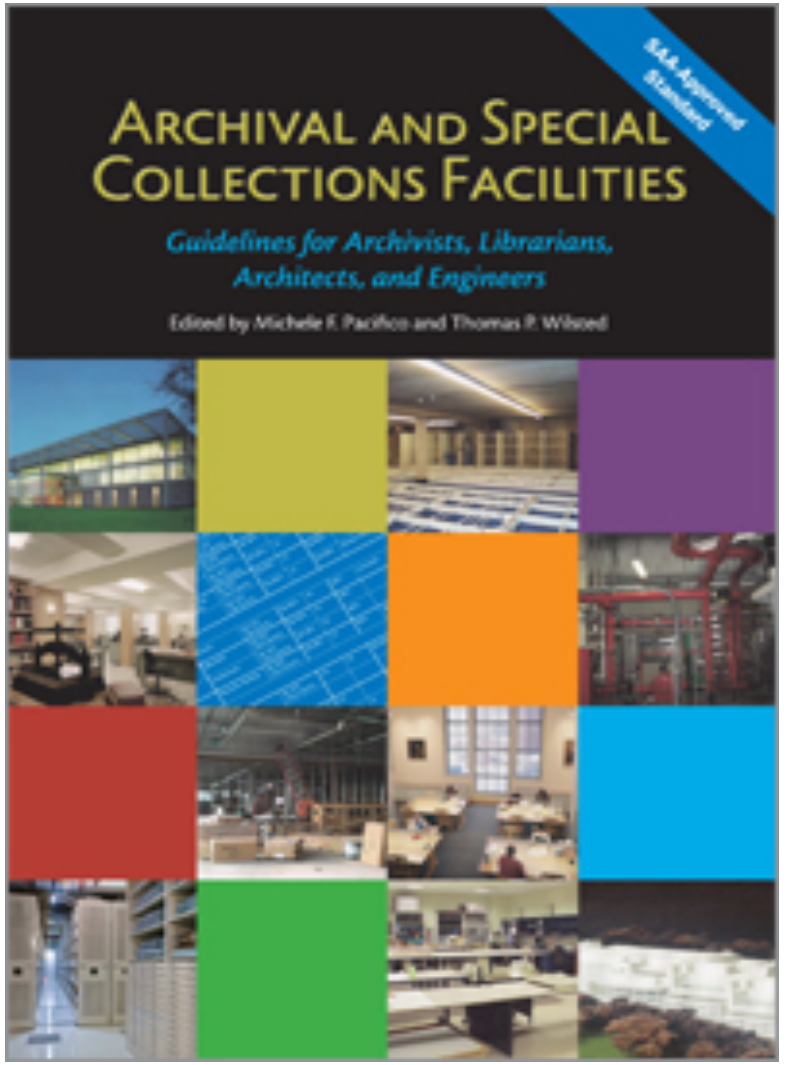
Archival Facility Design Standards

2009 SAA Facility Standards Include:

- Site
- Structural
- Exterior and Interior Construction
- Materials and Finishes
- Equipment and Furnishings
- HVAC
- Air Filtration
- Fire Protection
- Security
- Lighting
- Functional Spaces



SAA Standards Committee
SAA Technical Subcommittee - Archival Facility Guidelines

- Michele Pacifico and Tom Wilsted – Co-Chairs
- Angela Fritz
- Fiona Graham
- Jeremy Linden
- David Owings
- Scott Teixeira
- Gregor Trinkaus-Randall

Comments from 2015 + 2016 Forums

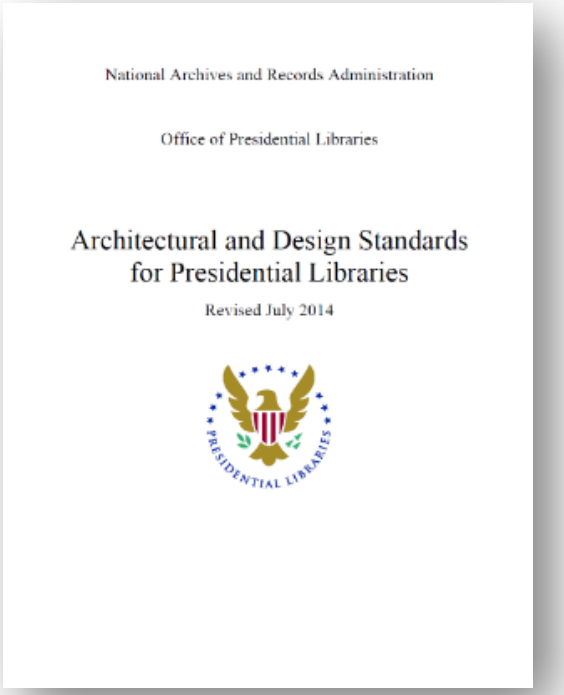
- Issue Guidelines online and in a 3 ring binder so future changes could be easily added to the publication.
- Use more charts
- Fire Safety - can we add more on other systems?
- Climate Change - can the Guidelines address the climate change issues challenging archival facilities?
- Sustainability issues?
- Digital records issues?
- Lighting changes?
- Can we include more on environmental standards and the trade-offs with climate, location, building materials, etc.?
- Address broadening the plus/minus ranges to reflect needs of collections, seasonal changes, and other areas that IPI is addressing?
- IPI Preservation index?

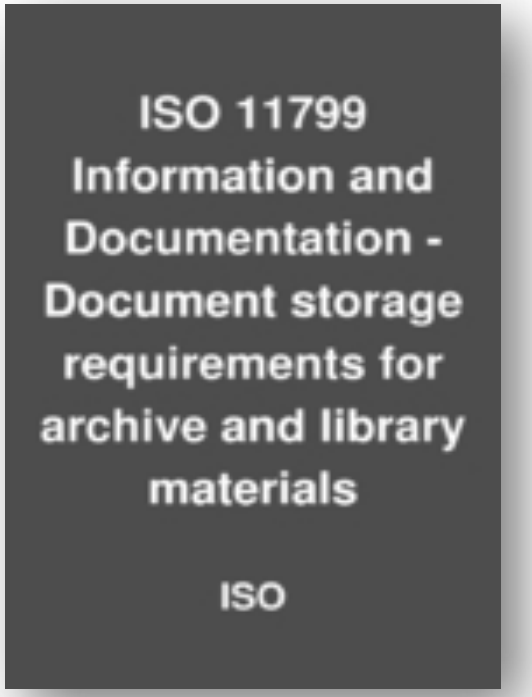
Challenges

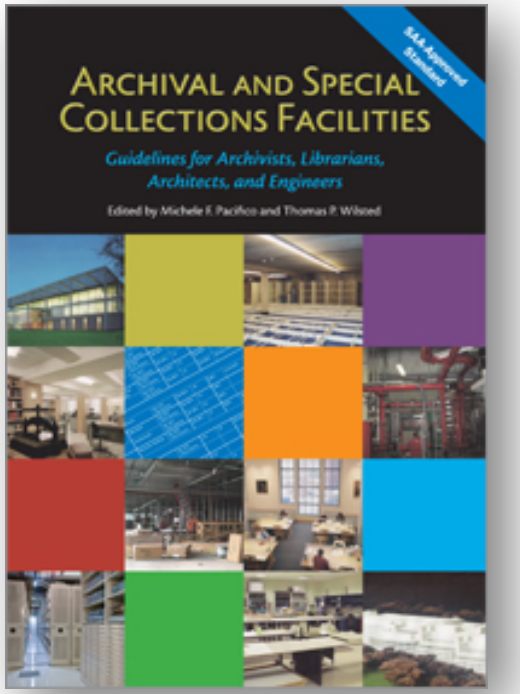
- New thinking
- Energy costs and sustainability
- Optimal preservation environment
- Air Filtration
- 24/7/365
- New technologies
- New materials
- Balance standards with realities of facilities and institutional budgets

Archives Design Standards

- NARA 1571
- ISO 11799: Document storage requirements for archive and library materials
- ASHRAE chapter 23
- SAA Standards

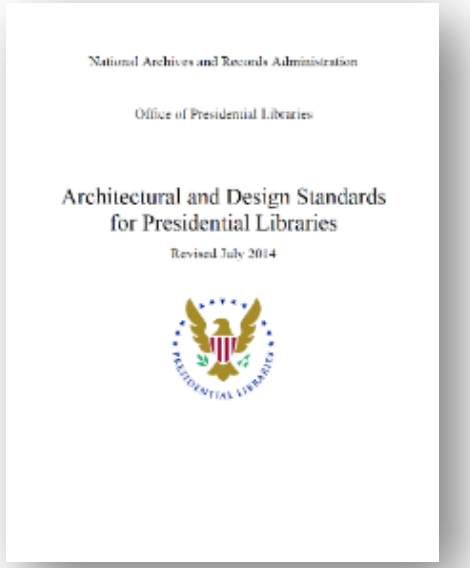






Changes to the Standards?

- PAS 198 (2012), UK BSI - spectrum based standard – Temperature & RH
- ISO 11799 (2015) – now uses ranked spectrum for temperature ranges
- Using NARA 1571 and ASHRAE 23 for their intent rather than by the letter of the table
- ICOM CC Declaration on Environmental Guidelines and Loan Agreement Standards
- ISO 19814: Collections management for archives and libraries – in development



NEW STANDARDS

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What is the optimal preservation environment?

- Textual Storage
- Cool Storage – BxW Photographs/Negatives, Films, Magnetic Tape/etc.
- Cold Storage – Color Film, Slides, Prints
- Art/Artifacts
- Digital Archives

What are the standards for the preservation environment?

TEMPERATURE AND RELATIVE HUMIDITY

- Paper records
  60° to 65°F max 35-45% RH +/- 5%
- Black x white, non acetate photograph and film, microforms, audio tapes and other special media
  50° to 65°F max 35% -45 % RH +/- 5%
- Black & white acetate photographic and film media
  35° to 40°F max 35% RH +/- 5%
- Color Photo and film media
  35°F to 40° F max 35% RH +/- 5%
- Magnetic/electronic media
  46°-65°F 35% RH +/- 5%

What are the standards for the preservation environment?

Current filtration standards for particulate and gaseous pollutants

Particulates:	MERV 14 or higher
Sulfur Dioxide:	1 ppb; 2.7 micrograms per cubic meter
Nitrogen Dioxide:	2.6 ppb; 5.0 micrograms per cubic meter
Ozone:	2.0 ppb; 4.0 micrograms per cubic meter
Formaldehyde:	4.0 ppb; 5.0 micrograms per cubic meter
Acetic Acid:	4.0 ppb; 10.0 micrograms per cubic meter

What is the optimal preservation environment?

- No one answer- different for each institution
- Must consider:
  - Design
  - Location
  - Size
  - Weather and seasons
  - Insulation
  - Mechanical systems
  - Materials and finishes
  - Lighting
  - Records use and handling
  - Budget

Lessons we are Learning

Out	Straight line temperature settings and strict limits on RH fluctuations.
In	Keeping temperatures as cool as possible while maintaining RH at levels that are appropriate to collections.
Out	Watching for daily or weekly relative humidity fluctuations.
In	Understanding equilibration rates and avoiding extreme dryness, dampness, or seasonal fluctuations between the two.

Balancing Collections and Sustainability

The goal is the *optimal* preservation environment

- Best possible preservation
- At the least possible energy cost
- That is sustainable over time

Optimal will be different for each institution – there is no "one size fits all" solution

Examples of Sustainable Solutions

- Analyze the HVAC system to identify opportunities to improve efficiency
- Broaden the plus/minus range for temperature and RH
- Allow seasonal changes to temperature and/or RH
- Allow “regular” storage to become cool in winter months
- Shut down HVAC systems
  - Overnight
  - On weekends
  - Climate based schedule
- Reduce outside air and/or use economizers

Getting To Go!

- To move forward with planning, the subcommittee need your support and comments.
- Not everything needs to be decided now –but we need to account for changing standards.

Next Steps

- Issue a draft of the facilities guidelines
- Peer comments
- Review from SAA and ACA

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THANK YOU