



PROCEDURAL LEAFLET

December 2003

RECORDS STORAGE CENTERS: CONSTRUCTION, ENVIRONMENT, CONTAINERS, SHELVING, AND SECURITY

Despite the advent of microforms and imaging, the record-keeping systems of most state and local agencies are still primarily paper-based. Outdated paper records, if left unchecked, are likely to proliferate and overwhelm the office files. Once a record in the office is no longer referenced frequently (normally after about three years), it becomes “inactive” and is a candidate for low-cost, high-volume storage. Records disposition authorities (RDAs) approved by the State or Local Government Records Commission can reduce file growth, and save costly storage space, by permitting short-term records to be legally destroyed. Some records, of course, must be maintained for many years, or even permanently, in order to fulfill their RDA’s retention requirements.

This leaflet offers general guidelines to custodians of state and local records on storing paper records so that they remain accessible for as long as legally required. It covers such basic issues as selecting storage sites; acquiring boxes, file folders, and shelving; controlling humidity and temperature; and protecting records from vermin, theft, fires, and other natural disasters. More detailed specifications and standards for records storage areas may be found in *NFPA232: Standard for the Protection of Records (2000 Edition)*, published by the National Fire Protection Association. Lists of vendors of supplies and shelving, and information on related topics such as disaster preparedness and recovery, may be obtained from the ADAH website (www.archives.state.al.us), or by contacting the Government Services Division office at (334) 242-4452 or records@archives.state.al.us.

1. Selecting and Preparing a Records Storage Center

(Note: A site evaluation form is found on pp. 7-10.)

- 1.1. **Location.** The storage site should be near enough to agency offices for easy access to inactive records, but it should not suffer from any structural or environmental deficiencies found in office space. So that records can be easily transported in and out of storage, the site should be located on the ground floor or have access to a reliable freight elevator. Storing records “across town” from the agency increases problems of records security and access. If utilized, remote off-site storage buildings should at least be close to major roads.
- 1.2. **Security.** For security reasons, the storage site should not share space with other offices or agencies. If a building must be shared, the records area should have its own, controlled entrance and be separated from other tenants by a firewall. There should be few doors or windows. Secondary doors (those not used as the primary entrance), or all doors in an unstaffed facility, should always be kept locked). To protect records from theft, damage from sunlight, and disaster, windows should be bricked or boarded.

- 1.3. Construction.** Concrete block construction is preferable for records storage sites. Avoid old wooden buildings (which are often firetraps), basements (which are prone to floods and chronic dampness), and attics (which are usually too hot and have weight limitations). High ceilings maximize shelving capacity and lower costs; ceilings *must* be high enough for upper shelves to stand clear of light fixtures, ducts, and sprinkler pipes. Floors ideally should be concrete slabs and must be able to tolerate a minimum live floor load of 300 lbs. per square foot. Records storage rooms should not be carpeted, as carpets collect dust, attract vermin, and may contain chemicals that harm the records. The site should be free of obvious environmental hazards, such as overhanging water pipes, nearby furnaces, leaking roofs, broken windows, or cracked walls. It should be fire-resistant and equipped, if possible, with sprinkler systems, fire detection systems, and burglar alarms. (See the NFPA leaflet cited.)
- 1.4. Appearance and “clean-up.”** Paint walls in records storage areas white to maximize reflected light. (Allow the paint to “off-gas” for several days before moving records back into the area.) If storing permanent or long-term records, fluorescent lights—which damage records over time—should be covered with ultraviolet filtering film. All lights should be turned off when the room is not in use. *Remove all non-record items (office supplies and equipment, Christmas decorations, court evidence, animal feed, fertilizer, oil and gasoline, or paint) from the records storage area.* Storing “junk” with public records makes the records difficult to access and exposes them to potential damage from fire or chemicals and rodent infestation.
- 1.5. Inspection.** If possible, an architect or structural engineer should evaluate any potential records storage site before records are moved there. ADAH Government Services Division archivists are available to inspect potential sites and make recommendations for improving them. Note: Under Local Government Records Commission regulations, such an inspection may be compulsory for a county or municipal agency storing permanent or historical records under a records deposit agreement. For more information, see the ADAH leaflet “Procedures for Implementing a Local Government Records Deposit Agreement,” available from the division or on the ADAH website (www.archives.alabama.gov).

2. Controlling Environmental Conditions and Acid Migration

Since about 1870, paper used for public records has usually been manufactured from wood pulp. Because it is highly acidic, wood-pulp paper quickly becomes yellowed and brittle, eventually causing record information to be lost. *Paper records will inevitably deteriorate within a few decades unless created on acid-free paper or stored in a controlled environment and buffered against acid migration.* However, it is neither necessary nor cost-effective to provide long-term protection for short-term records. Those with less than a 20-year retention period need only to be secured against extreme conditions or rapid fluctuations in humidity and temperature. For permanent or historical records, agencies should attempt to meet the following standards:

- 2.1. Temperature.** Ideally, paper records should be housed at a temperature of 65-75 degrees, with a variation of no more than two degrees. A stable environment—even if a bit too hot or humid—is better than one that permits rapid fluctuations. Therefore, a building’s climate-control system should *never* be turned off at night or over weekends if permanent or long-term records are stored there.

- 2.2. Humidity.** Relative humidity in storage areas should remain at 45-55%, with a variation of no more than 5%. Such levels seldom occur naturally in Alabama, so indoor humidity should be monitored in all areas where long-term records are maintained. If humidity rises above 60%, portable dehumidifiers (which are fairly inexpensive) should be used. Note that, in order to be effective, dehumidifiers must be emptied when the collection pan gets full. Conversely, when indoor humidity falls below 30% (as can happen when heaters are turned on in winter) humidifiers should be employed to keep records from becoming dry and brittle.
- 2.3. Acid-free containers and shelving.** Acid-free boxes and file folders should always be used for permanent or long-term records. Although somewhat more expensive than non-acid-free containers, they last longer and help to buffer the records' natural acidity, slowing down deterioration. Wooden shelving, which is still found in many records storage rooms, contains the same acids found in wood-pulp paper. These acids will quickly migrate into storage boxes and file folders (even acid-free ones) and, eventually, into the records. If wooden shelving must be used, it should be finished with several coats of water-based polyurethane to seal in acids, then covered with a sheet of 4-mil. inert Mylar (archival plastic sheeting). Metal shelving, besides being generally more efficient in design, provides the *only* archival-quality storage for permanent or long-term records.

3. Specifications for Archival Storage Materials and Shelving

- 3.1. File folders** may be either letter-sized (9-5/8" x 11-3/4") or legal-sized (9-5/8" x 14-3/4"). Various tab styles, papers, and colors are available. Although colored folders help in dividing active files by year or subject, they are not acid-free, and the color tends to "bleed" if they get wet. Acid-free folders (which are somewhat more expensive) should be used for archival or long-term records, and preferably whenever records are refoldered.
- 3.2. Records storage boxes.** The standard one-cubic-foot records box measures 15" x 10" x 12" (see Figure 1). It will accommodate both letter- and legal-sized folders. Using standardized boxes facilitates estimating records volume and storage requirements. Generally, boxes

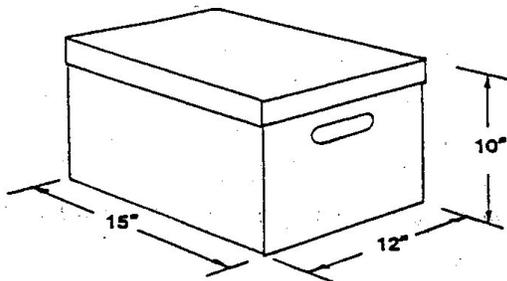
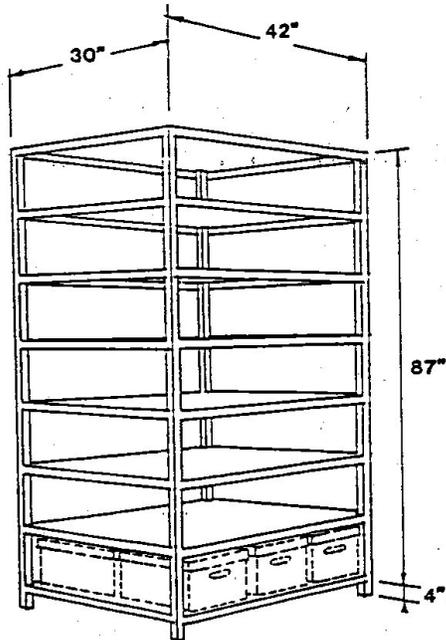


Figure 1: Standard Records Storage Box
(courtesy NAGARA)

are constructed of corrugated paper with a test weight of 200-250 lbs. Packed boxes may weigh 30-50 lbs., so hand openings are recommended for easier lifting. There are several styles of lids: flaps, one-piece, and detachable. The right choice depends on how frequently the records will be accessed: flap tops, for instance, are the cheapest but least durable. Acid-free boxes are of the same dimensions and construction, with detachable lids. While considerably more expensive, they are needed only for permanent records or records of historical value. Boxes should be clearly labeled—using standardized adhesive labels—to show the records' title, date of creation, retention period, and date of intended destruction.

3.3 Shelving. The standard shelf for records storage is 42" wide x 30" deep. (See Figure 2.) Such shelves permit easy access to six standard-sized records storage boxes. Thus, a seven-shelf unit will normally hold 36 cubic feet of records. (The top shelf, or "cap," should not



be used) Always leave at least two feet of clearance between the ceiling and the cap and place the lowest shelf at least 4" off the floor to protect records against floods. Each shelf should be able to support a minimum load of at least 500 lbs. Remember that floors in the records storage area must be strong enough to tolerate a minimum load of 300 lbs. per square foot (for seven-shelf units).

Page 6 contains specifications for "T and L" shelving adapted from shelving in use at ADAH. *Remember that these specifications are intended only as a sample, not as a recommendation or requirement.* Storage needs of individual agencies may vary considerably. For assistance in determining shelving specifications or requirements, contact the ADAH Government Records Division at (334) 242-4452 or records.archives@archives.alabama.gov.

Figure 2: Standard Records Shelving Unit
(courtesy NAGARA)

4. Security in Records Storage Areas

Although government officials have a statutory duty to provide access to most records, they are also required by law to protect records from "mutilation, loss or destruction" (*Code of Alabama 1975, Section 36-12-2*). Ensuring records' security can be problematic, especially when little-used or historical materials are stored outside of office space and access to them cannot easily be monitored. The following recommendations should help to prevent the theft or mutilation of inactive records and may assist agencies in setting access policies for all their records.

4.1. Lock remote records storage areas. Non-office areas where records have been stored should not be open to unrestricted public access. Keep them locked, along with any doors that could permit unobserved egress from the building. Naturally, public access to locked records areas must still be available upon request. Agency staff (*not* maintenance personnel or others with no responsibility for records) should retain all keys and be prepared either to accompany visitors to remote storage areas or to retrieve records for use in office space.

4.2. Have staff monitor all records storage areas. An agency staff member should always be present in any situation where records are open to the public. Many agencies have "old records rooms" that are adjacent to work areas but not routinely staffed. Genealogists, title researchers, or other visitors should not be allowed to "come and go" without any supervision. Records should *never* be left unobserved when visitors are using them. Either have staff accompany the visitor or (better yet) move a staff member's desk into the room to provide full-time surveillance.

- 4.3. Document public access to records storage areas in writing.** Under *Blankenship v. City of Hoover* (590 So2d 245 (Ala. 1991), government agencies may require people who use public records to fill out a form indicating their name, address, and reason for requesting records. Information on the form cannot be used as a reason for denying access, but it provides useful, written documentation if records are later discovered to be damaged or missing.
- 4.4. Supervise copying of fragile records.** While members of the public have a statutory right to “take a copy of any public record,” an agency has no legal duty to produce all copies by machine. Staff may require researchers to make hand-written copies of old and fragile records retrieved from storage areas, rather than subjecting such materials to damage from a photocopier. If time permits, photocopying of other records should be performed by staff, not visitors.
- 4.5. Restrict personal belongings in records storage areas.** Limit the kinds of items that researchers may take into a records storage area. Bulky coats, large bags or purses, and briefcases can be used to hide or hold records smuggled from the agency. Staff should require visitors to leave such materials behind before entering a records room and ask to inspect their belongings when they leave. Many archival repositories enforce a “pencils only” policy to prevent ink from damaging records. The agency should consider whether to permit the use of such items as laptop computers or hand-held scanners by researchers.
- 4.6. Display written records access policies.** Agency policies regarding access to public records should be written down and clearly posted at the entrance to records storage areas. Agency managers should ensure that all staff members are fully trained in these policies and apply them fairly, consistently, and uniformly. Besides improving the security of records storage areas, such procedures will help to avoid problems with citizens, the press, or other visitors in regard to records access.

More information on records access issues, including a model access policy, may be found in the procedural leaflet “Providing Access to Government Records,” available from the Government Records Division or on the ADAH website: www.archives.alabama.gov.

ADAH archivists can assist agencies to evaluate records storage areas or find vendors of supplies, shelving, or services. For help with these or other issues of records management and preservation, please contact:

**Alabama Department of Archives and History
Government Records Division
P.O. Box 300100, Montgomery, AL 36130-0100
Telephone: (334)242-4452; FAX: (334)240-3433
E-mail:
records.archives@archives.alabama.gov
ADAH web site: [http://
www.archives.alabama.gov](http://www.archives.alabama.gov)**

SAMPLE RECORDS SHELVING SPECIFICATIONS
(based on those used for the ADAH records center)

Specifications: All components of shelving to be modular and conform to the following specifications:

- Finish:** To be baked enamel or powder coated, all surfaces cleaned and phosphate washed, and putty or sand in color.
- Shelves:** Twenty two (22) gauge steel, cold-rolled box edge type (front and back). Front and rear box beam reinforcements are one and one-fourth (1-1/4) inches high by fifteen/thirty-two (15/32) inches wide and welded to shelf on six (6) centers. The corners are to be lapped and welded for rigidity. Each shelf shall support a minimum load of 500 pounds. Shelves to hold one layer of six (6) standard size file boxes weighing forty to fifty pounds each. Each unit will have six (6) shelves and a cap. Shelf sizes will be 42" wide by 30" deep.
- Shelf Clips:** Fourteen (14) gauge, hot-rolled, one piece construction with two (2) tabs to engage the seven-sixteen (7/16) square holes of the upright on one (1) inch centers. Minimum of four (4) shelf clips per shelf fully rated for all potential shelf loads.
- Uprights:** Angle posts one (1) inch by two and one-sixteenth (2-1/16) inch thirteen (13) or fourteen (14) gauge, cold-rolled steel to form "T" uprights. Posts shall be punched on one (1) or one and one-half (1-1/2) inch centers with pairs parallel to slots eleven/sixteenth (11/16) inch long, with one slot keyhole-shaped for bolting cross braces and accessories to uprights. All posts shall be one-piece posts.
- Opened Uprights:** To consist of two (2) sixteen (16) gauge, cold-rolled "T"s, one and one-half (1-1/2) inches by two and one-eighth (2-1/8) inches by one-eighth (1/8) inch with two pairs of one (1) inch twelve (12) gauge band cross-braces on all uprights.
- Closed Uprights:*** To consist of two (2) sixteen (16) gauge, cold-rolled "T"s, one and one-half (1-1/2) inch by two and one-eighth (2-1/8) inches by one-eighth (1/8) inch with twenty-four (24) gauge side sheet shopwelded on 8 inch centers to the closed uprights to be used at aisle ends.
- Cross-Braces:** One (1) inch twelve (12) gauge band cross-braces. Minimum of two (2) pairs of lateral cross-braces per unit and two (2) pairs of upright assembly cross-braces on each upright.
- Shim Plate:** Twenty two (22) gauge steel and less than two and one-half (2-1/2) inch by two and one-half (2-1/2) inch in size to be used where needed.

*Cross-braces at aisle ends add significantly to cost and impede air circulation. Agencies may wish to consider leaving them off and utilizing cross-braces only.

CHECKLIST FOR THE EVALUATION OF RECORDS STORAGE AREAS

This checklist provides guidelines for evaluating sites outside of office space that will be used to store inactive records. Covering such matters as site location, construction, environment, and security, it is suitable for evaluating either proposed storage areas or those already in use. Although the checklist mentions certain records storage standards, such standards are—in general—recommendations rather than requirements. However, agencies should attempt to meet them in any facility in which permanent or long-term records will be stored. An agency desiring to store permanent or long-term records in a staffed, non-agency, off-site repository should also consult the Local Government Records Commission's "Procedures for Implementing a Local Government Records Depository Agreement," available from the ADAH Government Services Division (334-242-4452) or on the ADAH web site (www.archives.alabama.gov). In such cases, the agency's chosen repository will be required to meet certain standards before any records are transferred.

Location/Jurisdiction:

Building/Storage Area Name or Designation _____

1. Is the storage area: adjacent in the same building in another building than agency office space?
If in another building, list street address: _____
Approximate distance: _____ miles _____ minutes from agency office space
2. Is the storage area owned by: the agency the parent state or local entity other (list): _____
On-Site Contact Person/Telephone Number _____

Construction:

3. What are the records storage area's approximate dimensions? _____ (length x width)
Square footage? _____ (sq. ft.) Ceiling height? _____ (ft.)
4. Is the building/storage area constructed of: brick wood concrete block ?
5. Is the floor composed of: wood ceramic tile plastic tile concrete slab?
 other (describe): _____ Is it carpeted? yes no
If yes, can the carpet be removed? yes no
6. Is the minimum live floor load of the records storage area at least 300 lbs. per square foot?
 yes no If no, what is the live load? _____
7. Is the records storage area on the ground floor? yes no Does it have access to a
 freight elevator loading dock?

Security:

8. Does the building/storage area share space with: other agencies of state or local government? non-government entities (list): _____
9. Is there a separate, secure entrance to the records storage area? yes no
How many entrances? _____ Can they be locked? yes no
Can visitors enter the records storage area without being observed? yes no
Is there a firewall separating the area from other building tenants? yes no
10. How many windows does the records storage area contain? _____ Are they at ground level?
 yes no Can they be bricked or boarded to protect records? yes no
11. Does the building/storage area have an intrusion alarm system? yes no
If no, how is the building/area secured? _____
-
- If yes, is the system inspected annually? yes no
Is the system in working order? yes no If no, explain: _____
-

Fire Safety:

12. Are there fire alarms in the records storage area? yes no Are the alarms linked to the fire department? yes no
13. Are alarm pulls and bells in working order? yes no
If no, explain: _____
Required corrective action: _____
Action taken & date: _____
14. Is the fire alarm panel functioning? yes no Are light bulbs in working order?
 yes no If not, explain: _____
-
15. Is there a sprinkler system in the records storage area? yes no
If there is a sprinkler system, is it inspected annually? yes no
Date of last inspection: _____
Is the sprinkler system in working order? yes no
If no, explain: _____
16. Are there smoke detectors in the storage area? yes no
Date of last inspection: _____
Are there smoke detectors in adjacent areas? yes no
Date of last inspection: _____

17. Does the fire marshal or fire department inspect the building annually? yes no
Date of last inspection: _____

18. Is an evacuation route for both fire and severe weather posted throughout the building?
 yes no

Environmental Systems (heating, ventilation, and air-conditioning):

19. Does the records storage area have any of the following climate-control systems or equipment? heating air-conditioning temperature/humidity monitoring
 humidity control

20. If the storage area lacks climate control, is it subject to extreme seasonal fluctuations in humidity and temperature? yes no

21. Will permanent or long-term records be housed in the storage area? yes no If yes, are heating and air-conditioning systems capable of maintaining the following environmental conditions:

Temperatures between 65 - 75 degrees, with a variation of no more than two degrees?

yes no If no, explain: _____

Relative humidity between 45 - 55%, with a variation of no more than 5%? yes no

If no, explain: _____

Corrective actions taken: _____

_____ Date: _____

Site Condition and Appearance:

22. Are the records storage area's walls, floors, and roof in sound condition? yes no
If no, describe the problems: _____

Corrective actions taken: _____

_____ Date: _____

23. Is lighting in the room adequate? yes no If fluorescent lights are in use, are they covered with ultraviolet filtering film? yes no

24. Are walls painted white (or a similar light color) to maximize available light? yes no

25. Are there any water or sewer pipes running through the records storage area? yes no
If yes, can they be removed, or the water flow shut off? yes no

26. Is the records storage area clean (dirt- and debris-free)? yes no

