§ 1233.20

(e) For further guidance on requesting records from a NARA Federal Records Center, consult the NARA Federal Records Centers Program Web site (http://www.archives.gov/frc/tool-kit.html#retrieval), or current NARA publications and bulletins by contacting the Office of Regional Records Services (NR), or individual NARA Federal Records Centers (http://www.archives.gov/frc/locations.html), or the Washington National Records Center (NWMW).

§ 1233.20 How are disposal clearances managed for records in NARA Federal Records Centers?

(a) The National Personnel Records Center will destroy records covered by General Records Schedules 1 and 2 in accordance with those schedules without further agency clearance.

(b) NARA Federal Records Centers will destroy other eligible Federal records only with the written concurrence of the agency having legal custody of the records.

(c) NARA Federal Records Centers will maintain documentation on the final disposition of records, as required in 36 CFR 1232.14(d).

(d) When NARA approves an extension of retention period beyond the time authorized in the records schedule for records stored in NARA Federal Records Centers, NARA will notify those affected records centers to suspend disposal of the records (see §1232.18 of this subchapter).

(e) For further guidance on records disposition, consult the NARA Federal Records Centers Program Web site (http://www.archives.gov/frc/tool-kit.html#disposition), or current NARA publications and bulletins by contacting the Office of Regional Records Services (NR) or individual NARA Federal Records Centers (http://www.archives.gov/frc/locations.html), individual NARA regional facilities, or the Washington National Records Center (NWMW).

PART 1234—FACILITY STANDARDS FOR RECORDS STORAGE FACILITIES

Subpart A—General

Sec. 1234.1 What authorities apply to part 1234?
guidelines to Federal agencies with respect to the storage of their records in commercial records storage facilities. See 44 U.S.C. 2104(a), 2904, and 3102. The regulations in this subpart apply to all records storage facilities Federal agencies use to store, service, and dispose of their records.

§ 1234.2 What does this part cover?
(a) This part covers the establishment, maintenance, and operation of records centers, whether Federally-owned and operated by NARA or another Federal agency, or Federally-owned and contractor operated. This part also covers an agency’s use of commercial records storage facilities. Records centers and commercial records storage facilities are referred to collectively as records storage facilities. This part specifies the minimum structural, environmental, property, and life-safety standards that a records storage facility must meet when the facility is used for the storage of Federal records.

(b) Except where specifically noted, this part applies to all records storage facilities. Certain noted provisions apply only to new records storage facilities established or placed in service on or after September 28, 2005.

§ 1234.3 What publications are incorporated by reference in this part?
(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, NARA must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the Office of the Federal Register. For information on the availability of this material at the Office of the Federal Register, call 202–741–6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) The material incorporated by reference is also available for inspection at NARA’s Archives Library Information Center (NWCCA), Room 2380, 8601 Adelphi Road, College Park, MD 20740–6001, phone number (301) 837–3415, and is available for purchase from the sources listed below. If you experience difficulty obtaining the standards referenced below, contact NARA’s Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740–6001, phone number (301) 837–1867.

(c) American National Standards Institute (ANSI). The following standards are available from the American National Standards Institute, 25 West 43rd St., 4th Floor, New York, NY 10036, phone number (212) 642–4900, or online at http://webstore.ansi.org.


(d) Document Center Inc. The following standards are available from the standards reseller the Document Center Inc., 111 Industrial Road, Suite 9, Belmont, CA, 94002, phone number (650) 591–7600, or online at http://www.document-center.com.


§ 1234.4


(f) Global Engineering Documents. The following standards are available from the standards reseller Global Engineering Documents, 15 Inverness Way, East Englewood, CO 80112, phone number (800) 854–7179, or online at http://www.global.ihs.com.


(2) Reserved.

(g) Techstreet. The following standards are available from the standards reseller Techstreet, 3916 Ranchero Drive, Ann Arbor, MI 48108, phone number (800) 699–9277, or online at http://www.Techstreet.com.


(2) UL 827 ("UL 827"), Central-Station Alarm Services, Sixth Edition, April 23, 1999, IBR approved for Appendix B to part 1234.


(b) The following standards are not available from the original publisher or a standards reseller. As indicated in paragraph (b) of this section, the standards are available for inspection at the NWCCA. In order to inspect the standards at a NARA location other than the NARA facility in College Park, MD, please contact the NWCCA, Room 2380, 8601 Adelphi Road, College Park, MD 20740–6001, phone number (301) 837–3415 or e-mail your request to alic@nara.gov.


(3) UL 611 ("UL 611"), Central-Station Burglar-Alarm Systems, February 22, 1996, IBR approved for §1234.10

§ 1234.4 What definitions are used in this part?

The following definitions apply to this part:

Auxiliary spaces mean non-records storage areas such as offices, research rooms, other work and general storage areas but excluding boiler rooms or rooms containing equipment operating with a fuel supply such as generator rooms.

Commercial records storage facility has the meaning specified in §1220.18 of this chapter.

Existing records storage facility means any records center or commercial records storage facility used to store records on September 27, 2005, and that has stored records continuously since that date.

Fire barrier wall means a wall, other than a fire wall, having a fire resistance rating, constructed in accordance with NFPA 221 (incorporated by reference, see §1234.3).

Licensed fire protection engineer means a licensed or registered professional engineer with a recognized specialization in fire protection engineering. For those States that do not separately license or register fire protection engineers, a licensed or registered professional engineer with training and experience in fire protection engineering.
§ 1234.10 What are the facility requirements for all records storage facilities?

(a) The facility must be constructed with non-combustible materials and building elements, including walls, columns and floors. There are two exceptions to this requirement:

(1) Roof elements may be constructed with combustible materials if installed in accordance with local building codes and if roof elements are protected by a properly installed, properly maintained wet-pipe automatic sprinkler system, as specified in NFPA 13 (incorporated by reference, see §1234.3).

(2) An agency may request a waiver of the requirement specified in paragraph (a) from NARA for an existing records storage facility with combustible building elements to continue to operate until October 1, 2009. In its request for a waiver, the agency must provide documentation that the facility has a fire suppression system specifically designed to mitigate this hazard and that the system meets the requirements of §1234.12(a). Requests must be submitted to the Director, Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740–6001, phone number (301) 837–1867.

(b) A facility with two or more stories must be designed or reviewed by a licensed fire protection engineer and civil/structural engineer to avoid catastrophic failure of the structure due to an uncontrolled fire on one of the intermediate floor levels. For new buildings the seals on the construction drawings serve as proof of this review. For existing buildings, this requirement may be demonstrated by a professional letter of opinion under seal by a licensed fire protection engineer that the fire resistance of the separating floor(s) is(are) at least four hours, and a professional letter of opinion under seal by a licensed civil/structural engineer that there are no obvious structural weaknesses that would indicate a high potential for structural catastrophic collapse under fire conditions.

(c) The building must be sited a minimum of five feet above and 100 feet from any 100 year flood plain areas, or be protected by an appropriate flood wall that conforms to local or regional building codes.

(d) The facility must be designed in accordance with the applicable national, regional, state, or local building codes (whichever is most stringent) to provide protection from building collapse or failure of essential equipment from earthquake hazards, tornadoes, hurricanes and other potential natural disasters.

(e) Roads, fire lanes and parking areas must permit unrestricted access for emergency vehicles.

(f) A floor load limit must be established for the records storage area by a licensed structural engineer. The limit must take into consideration the
height and type of the shelving or storage equipment, the width of the aisles, the configuration of the space, etc. The allowable load limit must be posted in a conspicuous place and must not be exceeded.

(g) The facility must ensure that the roof membrane does not permit water to penetrate the roof. NARA strongly recommends that this requirement be met by not mounting equipment on the roof and placing nothing else on the roof that may cause damage to the roof membrane. Alternatively, a facility may meet this requirement with stringent design specifications for roof-mounted equipment in conjunction with a periodic roof inspection program performed by appropriately certified professionals.

(1) New records storage facilities must meet the requirements in this paragraph (g) beginning on September 28, 2005.

(2) Existing facilities must meet the requirements in this paragraph (g) no later than October 1, 2009.

(h) Piping (with the exception of fire protection sprinkler piping and storm water roof drainage piping) must not be run through records storage areas unless supplemental measures such as gutters or shields are used to prevent water leaks and the piping assembly is inspected for potential leaks regularly. If drainage piping from roof drains must be run through records storage areas, the piping must be run to the nearest vertical riser and must include a continuous gutter sized and installed beneath the lateral runs to prevent leakage into the storage area. Vertical pipe risers required to be installed in records storage areas must be fully enclosed by shaft construction with appropriate maintenance access panels.

(1) New records storage facilities must meet the requirements in this paragraph (h) beginning on September 28, 2005.

(2) Existing facilities must meet the requirements in this paragraph (h) no later than October 1, 2009.

(i) The following standards apply to records storage shelving and racking systems:

(1) All storage shelving and racking systems must be designed and installed to provide seismic bracing that meets the requirements of the applicable state, regional, and local building code (whichever is most stringent);

(2) Racking systems, steel shelving, or other open-shelf records storage equipment must be braced to prevent collapse under full load. Each racking system or shelving unit must be industrial style shelving rated at least 50 pounds per cubic foot supported by the shelf;

(3) Compact mobile shelving systems (if used) must be designed to permit proper air circulation and fire protection (detailed specifications that meet this requirement can be provided by NARA by writing to Director, Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740–6001.), phone number (301) 837–1867).

(j) The area occupied by the records storage facility must be equipped with an anti-intrusion alarm system, or equivalent, meeting the requirements of UL 1076 (incorporated by reference, see § 1234.3), level AA, to protect against unlawful entry after hours and to monitor designated interior storage spaces. This intrusion alarm system must be monitored in accordance with UL 611, (incorporated by reference, see § 1234.3).

(k) The facility must comply with the requirements for a Level III facility as defined in the Department of Justice, U. S. Marshals Service report Vulnerability Assessment of Federal Facilities dated June 28, 1995. These requirements are provided in Appendix A to this part 1234. Agencies may require compliance with Level IV or Level V facility security requirements if the facility is classified at the higher level.

(l) Records contaminated by hazardous materials, such as radioactive isotopes or toxins, infiltrated by insects, or exhibiting active mold growth must be stored in separate areas having separate air handling systems from other records.

(m) To eliminate damage to records and/or loss of information due to insects, rodents, mold and other pests that are attracted to organic materials under specific environmental conditions, the facility must have an Integrated Pest Management program as
defined in the Food Protection Act of 1996 (Section 303, Pub. L. 104–170, 110 Stat. 1512). This states in part that Integrated Pest Management is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. The IPM program emphasizes three fundamental elements:

(1) **Prevention.** IPM is a preventive maintenance process that seeks to identify and eliminate potential pest access, shelter, and nourishment. It also continually monitors for pests themselves, so that small infestations do not become large ones;

(2) **Least-toxic methods.** IPM aims to minimize both pesticide use and risk through alternate control techniques and by favoring compounds, formulations, and application methods that present the lowest potential hazard to humans and the environment; and

(3) **Systems approach.** The IPM pest control contract must be effectively coordinated with all other relevant programs that operate in and around a building, including plans and procedures involving design and construction, repairs and alterations, cleaning, waste management, food service, and other activities.

(n) For new records storage facilities only, the additional requirements in this paragraph (n) must be met:

(1) Do not install mechanical equipment, excluding material handling and conveyance equipment that have operating thermal breakers on the motor, containing motors rated in excess of 1 HP within records storage areas (either floor mounted or suspended from roof support structures).

(2) Do not install high-voltage electrical distribution equipment (i.e., 13.2kv or higher switchgear and transformers) within records storage areas (either floor mounted or suspended from roof support structures).

(3) A redundant source of primary electric service such as a second primary service feeder should be provided to ensure continuous, dependable service to the facility especially to the HVAC systems, fire alarm and fire protection systems. Manual switching between sources of service is acceptable.

(4) A facility storing permanent records must be kept under positive air pressure, especially in the area of the loading dock. In addition, to prevent fumes from vehicle exhausts from entering the facility, air intake louvers must not be located in the area of the loading dock, adjacent to parking areas, or in any location where a vehicle engine may be running for any period of time. Loading docks must have an air supply and exhaust system that is separate from the remainder of the facility.

§ 1234.12 What are the fire safety requirements that apply to records storage facilities?

(a) The fire detection and protection systems must be designed or reviewed by a licensed fire protection engineer. If the system was not designed by a licensed fire protection engineer, the review requirement is met by furnishing a report under the seal of a licensed fire protection engineer that describes the design intent of the fire detection and suppression system, detailing the characteristics of the system, and describing the specific measures beyond the minimum features required by code that have been incorporated to minimize loss. The report should make specific reference to appropriate industry standards used in the design, such as those issued by the National Fire Protection Association, and any testing or modeling or other sources used in the design.

(b) All interior walls separating records storage areas from each other and from other storage areas in the building must be at least three-hour fire barrier walls. A records storage facility may not store more than 200,000 cubic feet total of Federal records in a single records storage area. When Federal records are combined with other records in a single records storage area, only the Federal records will apply toward this limitation.

(c) Fire barrier walls that meet the following specifications must be provided:

(1) For existing records storage facilities, at least one-hour-rated fire barrier walls must be provided between the records storage areas and other auxiliary spaces.
(2) For new records storage facilities, two-hour-rated fire barrier walls must be provided between the records storage areas and other auxiliary spaces. One exterior wall of each stack area must be designed with a maximum fire resistive rating of one hour, or, if rated more than one hour, there must be at least one knock-out panel in one exterior wall of each stack area.

(d) Penetrations in the walls must not reduce the specified fire resistance ratings. The fire resistance ratings of structural elements and construction assemblies must be in accordance with ASTM E 119–98 (incorporated by reference, see §1234.3).

(e) The fire resistive rating of the roof must be a minimum of 1/2 hour for all records storage areas, or must be protected by an automatic sprinkler system designed, installed, and maintained in accordance with NFPA 13 (incorporated by reference, see §1234.3).

(f) Openings in fire barrier walls separating records storage areas must be avoided to the greatest extent possible. If openings are necessary, they must be protected by self-closing or automatic Class A fire doors, or equivalent doors that maintain the same rating as the wall.

(g) Roof support structures that cross or penetrate fire barrier walls must be cut and supported independently on each side of the fire barrier wall.

(h) If fire barrier walls are erected with expansion joints, the joints must be protected to their full height.

(i) Automatic roof vents for routine ventilation purposes must not be designed into new records storage facilities. Automatic roof vents, designed solely to vent in the case of a fire, with a temperature rating at least twice that of the sprinkler heads are acceptable.

(k) Where lightweight steel roof or floor supporting members (e.g., bar joists having top chords with angles 2 by 12 inches or smaller, 1/4-inch thick or smaller, and 13/16-inch or smaller Web diameters) are present, they must be protected either by applying a 10-minute fire resistive coating to the top chords of the joists, or by retrofitting the sprinkler system with large drop sprinkler heads. If a fire resistive coating is applied, it must be a product that will not release (off gas) harmful fumes into the facility. If fire resistive coating is subject to air erosion or flaking, it must be fully enclosed in a drywall containment constructed of metal studs with fire retardant drywall. Retrofitting may require modifications to the piping system to ensure that adequate water capacity and pressure are provided in the areas to be protected with these large drop sprinkler heads.

(l) Open flame (oil or gas) unit heaters or equipment, if used in records storage areas, must be installed or used in the records storage area in accordance with NFPA 54 (incorporated by reference, see §1234.3), and the IAPMO/ANSI UMC 1, Uniform Mechanical Code (incorporated by reference, see §1234.3).

(m) For existing records storage facilities, boiler rooms or rooms containing equipment operating with a fuel supply (such as generator rooms) must be separated from records storage areas by 2-hour-rated fire barrier walls with no openings directly from these rooms to the records storage areas. Such areas must be vented directly to the outside to a location where fumes will not be drawn back into the facility.

(n) For new records storage facilities, boiler rooms or rooms containing equipment operating with a fuel supply (such as generator rooms) must be separated from records storage areas by 4-hour-rated fire barrier walls with no openings directly from these rooms to the records storage areas. Such areas must be vented directly to the outside to a location where fumes will not be drawn back into the facility.

(o) For new records storage facilities, fuel supply lines must not be installed in areas containing records and must be separated from such areas with 4-hour rated construction assemblies.

(p) Equipment rows running perpendicular to the wall must comply with NFPA 101 (incorporated by reference, see §1234.3), with respect to egress requirements.
(q) No oil-type electrical transformers, regardless of size, except thermally protected devices included in fluorescent light ballasts, may be installed in the records storage areas. All electrical wiring must be in metal conduit, except that armored cable may be used where flexible wiring connections to light fixtures are required. Battery charging areas for electric forklifts must be separated from records storage areas with at least a 2-hour rated fire barrier wall.

(r) Hazardous materials, including records on cellulose nitrate film, must not be stored in records storage areas. Nitrate motion picture film and nitrate sheet film may be stored in separate areas that meet the requirements of the appropriate NFPA standards, NFPA 40-1997 (incorporated by reference, see §1234.3), or NFPA 42 (incorporated by reference, see §1234.3).

(s) All record storage and adjoining areas must be protected by a professionally-designed fire-safety detection and suppression system that is designed to limit the maximum anticipated loss in any single fire event involving a single ignition and no more than 8 ounces of accelerant to a maximum of 300 cubic feet of records destroyed by fire. Section 1234.32 specifies how to document compliance with this requirement.

§ 1234.14 What are the requirements for environmental controls for records storage facilities?

(a) Paper-based temporary records. Paper-based temporary records must be stored under environmental conditions that prevent the active growth of mold. Exposure to moisture through leaks or condensation, relative humidities in excess of 70%, extremes of heat combined with relative humidity in excess of 55%, and poor air circulation during periods of elevated heat and relative humidity are all factors that contribute to mold growth.

(b) Nontextual temporary records. Nontextual temporary records, including microforms and audiovisual and electronic records, must be stored in records storage space that is designed to preserve them for their full retention period. New records storage facilities that store nontextual temporary records must meet the requirements in this paragraph (b) beginning on September 28, 2005. Existing records storage facilities that store nontextual temporary records must meet the requirements in this paragraph (b) no later than October 1, 2009. At a minimum, nontextual temporary records must be stored in records storage space that meets the requirements for medium term storage set by the appropriate standard in this paragraph (b). In general, medium term conditions as defined by these standards are those that will ensure the preservation of the materials for at least 10 years with little information degradation or loss. Records may continue to be usable for longer than 10 years when stored under these conditions, but with an increasing risk of information loss or degradation with longer times. If temporary records require retention longer than 10 years, better storage conditions (cooler and drier) than those specified for medium term storage will be needed to maintain the usability of these records. The applicable standards are:

1. ANSI/PIMA IT9.11 (incorporated by reference, see §1234.3);
2. ANSI/NAPM IT9.23 (incorporated by reference, see §1234.3);
3. ANSI/PIMA IT9.25 (incorporated by reference, see §1234.3);
4. ANSI/NAPM IT9.20 (incorporated by reference, see §1234.3); and/or
5. ANSI/NAPM IT9.18 (incorporated by reference, see §1234.3).

(c) Paper-based permanent, unscheduled and sample/select records. Paper-based permanent, unscheduled, and sample/select records must be stored in records storage space that provides 24 hour/365 days per year air conditioning (temperature, humidity, and air exchange) equivalent to that required for office space. See ANSI/ASHRAE Standard 55 (incorporated by reference, see §1234.3), and ASHRAE Standard 62 (incorporated by reference, see §1234.3), for specific requirements. New records storage facilities that store paper-based permanent, unscheduled, and/or sample/select records must meet the requirement in this paragraph (c) beginning on September 28, 2005. Existing storage facilities that store paper-based permanent, unscheduled, and/or sample/select records must meet the
requirement in this paragraph (c) no later than October 1, 2009.

(d) Nontextual permanent, unscheduled, and/or sample/select records. All records storage facilities that store microfilm, audiovisual, and/or electronic permanent, unscheduled, and/or sample/select records must comply with the storage standards for permanent and unscheduled records in parts 1238, 1237, and/or 1236 of this subchapter, respectively.

Subpart C—Handling Deviations
From NARA’s Facility Standards

§ 1234.20 What rules apply if there is a conflict between NARA standards and other regulatory standards that a facility must follow?

(a) If any provisions of this part conflict with local or regional building codes, the following rules of precedence apply:

(1) Between differing levels of fire protection and life safety, the more stringent provision applies; and

(2) Between mandatory provisions that cannot be reconciled with a requirement of this part, the local or regional code applies.

(b) If any of the provisions of this part conflict with mandatory life safety or ventilation requirements imposed on underground storage facilities by 30 CFR chapter I, 30 CFR chapter 1 applies.

(c) NARA reserves the right to require documentation of the mandatory nature of the conflicting code and the inability to reconcile that provision with NARA requirements.

§ 1234.22 How does an agency request a waiver from a requirement in this part?

(a) Types of waivers that may be approved. NARA may approve exceptions to one or more of the standards in this part for:

(1) Systems, methods, or devices that are demonstrated to have equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety to those prescribed by this subpart;

(2) Existing agency records centers that met the NARA standards in effect prior to January 3, 2000, but do not meet a new standard required to be in place on September 28, 2005; and

(3) The application of roof requirements in §§1234.10 and 1234.12 to underground storage facilities.

(b) Where to submit a waiver request. The agency submits a waiver request, containing the information specified in paragraphs (c), (d), and/or (e) of this section to the Director, Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Rd., College Park, MD 20740–6001, phone number (301) 837–1867.

(c) Content of request for waivers for equivalent or superior alternatives. The agency’s waiver request must contain:

(1) A statement of the specific provision(s) of this part for which a waiver is requested, a description of the proposed alternative, and an explanation of how it is equivalent to or superior to the NARA requirement; and

(2) Supporting documentation that the alternative does not provide less protection for Federal records than that which would be provided by compliance with the corresponding provisions contained in this subpart. Documentation may take the form of certifications from a licensed fire protection engineer or a structural or civil engineer, as appropriate; reports of independent testing; reports of computer modeling; and/or other supporting information.

(d) Content of request for waiver for previously compliant agency records center. The agency’s waiver request must identify which requirement(s) the agency records center cannot meet and provide a plan with milestones for bringing the center into compliance.

(e) Content of request for waiver of roof requirements for underground facility. The agency’s waiver request must identify the location of the facility and whether the facility is a drift entrance facility or a vertical access facility.

§ 1234.24 How does NARA process a waiver request?

(a) Waiver for equivalent or superior alternative. NARA will review the waiver request and supporting documentation.

(1) If in NARA’s judgment the supporting documentation clearly supports the claim that the alternative is
equivalent or superior to the NARA requirement, NARA will grant the waiver and notify the requesting agency within 30 calendar days.

(2) If NARA questions whether supporting documentation demonstrates that the proposed alternative offers at least equal protection to Federal records, NARA will consult the appropriate industry standards body or other qualified expert before making a determination. NARA will notify the requesting agency within 30 calendar days of receipt of the request that consultation is necessary and will provide a final determination within 60 calendar days. If NARA does not grant the waiver, NARA will furnish a full explanation of the reasons for its decision.

(b) Waiver of new requirement for existing agency records center. NARA will review the agency’s waiver request and plan to bring the facility into compliance.

(1) NARA will approve the request and plan within 30 calendar days if NARA judges the planned actions and time frames for bringing the facility into compliance are reasonable.

(2) If NARA questions the feasibility or reasonableness of the plan, NARA will work with the agency to develop a revised plan that NARA can approve and the agency can implement. NARA may grant a short-term temporary waiver, not to exceed 180 calendar days, while the revised plan is under development.

(c) Waiver of roof requirements for underground storage facilities. NARA will normally grant the waiver and notify the requesting agency within 10 work days if the agency has not also requested a waiver of a different requirement under §1234.30. If the agency has another waiver request pending for the same facility, NARA will respond to all of the waiver requests at the same time and within the longest time limits.

Subpart D—Facility Approval and Inspection Requirements

§ 1234.30 How does an agency request authority to establish or relocate records storage facilities?

(a) General policy. Agencies are responsible for ensuring that records in their legal custody are stored in appropriate space as outlined in this part. Under §1232.18(a), agencies are responsible for initiating action to remove records from space that does not meet these standards if deficiencies are not corrected within 6 months after initial discovery of the deficiencies by NARA or the agency and to complete removal of the records within 18 months after initial discovery of the deficiencies.

(1) Agency records centers. Agencies must obtain prior written approval from NARA before establishing or relocating an agency records center. Each separate agency records center must be specifically approved by NARA prior to the transfer of any records to that individual facility. If an agency records center has been approved for the storage of Federal records of one agency, any other agency that proposes to store its records in that facility must still obtain NARA approval to do so.

(2) Commercial records storage facilities. An agency may contract for commercial records storage services. However, before any agency records are transferred to a commercial records storage facility, the transferring agency must ensure that the facility meets all of the requirements for an agency records storage facility set forth in this subpart and must submit the documentation required in paragraph (e) of this section.

(b) Exclusions. For purposes of this section, the term “agency records center” excludes NARA-owned and operated records centers. For purposes of this section and §1234.34, the term “agency records center” also excludes agency records staging and/or holding areas with a capacity for containing less than 25,000 cubic feet of records. However, such records centers and areas, including records centers operated and maintained by NARA, must comply with the facility standards in §§1234.10 through 1234.14.

(c) Content of requests for agency records centers. Requests for authority to establish or relocate an agency records center, or to use an agency records center operated by another agency, must be submitted in writing to the Director, Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD.
§ 1234.32 What does an agency have to do to certify a fire-safety detection and suppression system?

(a) Content of documentation. The agency must submit documentation to the Director, Space and Security Management Division (NAS), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001, phone number (301) 837-1867, that describes the space being protected (e.g., the type and stacking height of the storage equipment used, or how the space is designed, controlled, and operated) and the characteristics of the fire-safety detection and suppression system used. The documentation must demonstrate how that system meets the requirement in §1234.12(s) through:

(1) A statement that the facility is using a NARA certified system as described in Appendix B to this part;

(2) A report of the results of independent live fire testing (Factory Mutual, Underwriters Laboratories or Southwest Research Institute); or

(3) A report under seal of a licensed fire protection engineer that:

(i) Describes the design intent of the fire suppression system to limit the maximum anticipated loss in any single fire event involving a single ignition and no more than 8 fluid ounces of petroleum-type hydrocarbon accelerant (such as, for example, heptanes or gasoline) to a maximum of 300 cubic feet of Federal records destroyed by fire. The report need not predict a maximum single event loss at any specific number, but rather should describe the design intent of the fire suppression system. The report may make reasonable engineering and other assumptions such as that the fire department responds within XX minutes (the local fire department’s average response time) and promptly commences suppression actions. In addition, any report prepared under this paragraph should assume that the accelerant is saturated in a cotton wick that is 3 inches in diameter and 6 inches long and sealed in a plastic bag and that the fire is started in an aisle at the face of

§ 1234.32 36 CFR Ch. XII (7–1–12 Edition)
a carton at floor level. Assumptions must be noted in the report:

(ii) Details the characteristics of the system; and

(iii) Describes the specific measures beyond the minimum features required by the applicable building code that have been incorporated to limit destruction of records. The report should make specific references to industry standards used in the design, such as those issued by the National Fire Protection Association, and any testing or modeling or other sources used in the design.

(b) NARA action. (1) NARA will approve the fire-safety detection and suppression system within 10 work days if NARA has previously approved the system design for similarly configured space or if a report of independent testing of a new system design is furnished as documentation.

(2) If, in NARA's judgment, the supporting documentation provided in accordance with paragraph (a)(3) of this section clearly demonstrates compliance with §1234.12(a), NARA will approve the fire-safety detection and suppression system within 30 calendar days.

(3) If NARA questions whether supporting documentation demonstrates compliance with §1234.12(a), NARA will consult the appropriate industry standards body or other qualified expert before making a determination. Before any consultation, NARA may ask the agency for additional clarifying information. NARA will notify the requesting agency within 30 calendar days of receipt of the request that consultation is necessary and will provide a final determination within 60 calendar days. If NARA does not approve the system, NARA will furnish a full explanation of the reasons for its decision.

(4) NARA will maintain a list of approved alternative systems.

§1234.34 When may NARA conduct an inspection of a records storage facility?

(a) At the time an agency submits a request to establish an agency records center, pursuant to §1234.30, NARA may conduct an inspection of the proposed facility to ensure that the facility complies fully with the standards in this subpart. NARA may also conduct periodic inspections of agency records centers so long as such facility is used as an agency records center. NARA will inspect its own records center facilities on a periodic basis to ensure that they are in compliance with the requirements of this subpart.

(b) Agencies must ensure, by contract or otherwise, that agency and NARA officials, or their delegates, have the right to inspect commercial records storage facilities to ensure that such facilities fully comply with the standards in this subpart. NARA may conduct periodic inspections of commercial records storage facilities so long as agencies use such facilities to store agency records. The using agency, not NARA, will be responsible for paying any fee or charge assessed by the commercial records storage facility for NARA's conducting an inspection.

(c) NARA will contact the agency operating the records center or the agency holding a contract with a commercial records storage facility in advance to set a date for the inspection.

APPENDIX A TO PART 1234—MINIMUM SECURITY STANDARDS FOR LEVEL III FEDERAL FACILITIES

RECOMMENDED STANDARDS CHART

<table>
<thead>
<tr>
<th>Perimeter Security</th>
</tr>
</thead>
</table>

| Parking: |
|-----------------|-----------------|
| Control of facility parking | Required. |
| Control of adjacent parking | Desirable. |
| Avoid leases where parking cannot be controlled | Desirable. |
| Leases should provide security control for adjacent parking | Desirable. |
| Post signs and arrange for towing unauthorized vehicles | Required. |
| ID system and procedures for authorized parking (placard, decal, card key, etc.) | Required. |
| Adequate lighting for parking areas | Required. |

[Reproduced from Section 2.3 (pp. 2–6 through 2–9) of U.S. Department of Justice, United States Marshals Service report Vulnerability Assessment of Federal Facilities]
## Entry Security

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed Circuit Television (CCTV) Monitoring:</td>
<td></td>
</tr>
<tr>
<td>CCTV surveillance cameras with time lapse video recording</td>
<td></td>
</tr>
<tr>
<td>Post signs advising of 24 hour video surveillance</td>
<td></td>
</tr>
<tr>
<td>Lighting:</td>
<td></td>
</tr>
<tr>
<td>Lighting with emergency power backup</td>
<td>Required.</td>
</tr>
<tr>
<td>Physical Barriers:</td>
<td></td>
</tr>
<tr>
<td>Extend physical perimeter with barriers (concrete and/or steel composition)</td>
<td>Desirable.</td>
</tr>
<tr>
<td>Parking barriers</td>
<td>Desirable.</td>
</tr>
</tbody>
</table>

## Interior Security

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee/Visitor identification:</td>
<td></td>
</tr>
<tr>
<td>Agency photo ID for all personnel displayed at all times</td>
<td></td>
</tr>
<tr>
<td>Visitor control/screening system</td>
<td></td>
</tr>
<tr>
<td>Visitor identification accountability system</td>
<td></td>
</tr>
<tr>
<td>Establish ID issuing authority</td>
<td></td>
</tr>
<tr>
<td>Utilities:</td>
<td></td>
</tr>
<tr>
<td>Prevent unauthorized access to utility areas</td>
<td>Required.</td>
</tr>
<tr>
<td>Provide emergency power to critical systems (alarm systems, radio communications, computer facilities, etc.)</td>
<td>Required.</td>
</tr>
<tr>
<td>Occupant Emergency Plans:</td>
<td></td>
</tr>
<tr>
<td>Examine occupant emergency plans (OEP) and contingency procedures based on threats</td>
<td>Required.</td>
</tr>
<tr>
<td>OEPs in place, updated annually, periodic testing exercise</td>
<td>Required.</td>
</tr>
<tr>
<td>Assign &amp; train OEP officials (assignment based on largest tenant in facility)</td>
<td>Required.</td>
</tr>
<tr>
<td>Annual tenant training</td>
<td>Required.</td>
</tr>
<tr>
<td>Daycare Centers:</td>
<td></td>
</tr>
<tr>
<td>Evaluate whether to locate daycare facilities in buildings with high threat activities</td>
<td>Required.</td>
</tr>
<tr>
<td>Compare feasibility of locating daycare in outside locations</td>
<td>Required.</td>
</tr>
</tbody>
</table>

## Security Planning

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence Sharing:</td>
<td></td>
</tr>
<tr>
<td>Establish law enforcement agency/security liaisons</td>
<td>Required.</td>
</tr>
<tr>
<td>Review/establish procedure for intelligence receipt/dissemination</td>
<td>Required.</td>
</tr>
<tr>
<td>Establish uniform security/threat nomenclature</td>
<td>Required.</td>
</tr>
<tr>
<td>Training:</td>
<td></td>
</tr>
<tr>
<td>Conduct annual security awareness training</td>
<td>Required.</td>
</tr>
<tr>
<td>Establish standardized armed guard qualifications/training requirements</td>
<td>Required.</td>
</tr>
<tr>
<td>Tenant Assignment:</td>
<td></td>
</tr>
<tr>
<td>Co-locate agencies with similar security needs</td>
<td>Desirable.</td>
</tr>
<tr>
<td>Do not co-locate high/low risk agencies</td>
<td>Desirable.</td>
</tr>
<tr>
<td>Administrative Procedures:</td>
<td></td>
</tr>
<tr>
<td>Establish flexible work schedule in high threat/high risk areas to minimize employee vulnerability to criminal activity.</td>
<td>Desirable.</td>
</tr>
<tr>
<td>Arrange for employee parking in/near building after normal work hours</td>
<td>Recommended.</td>
</tr>
<tr>
<td>Conduct background security checks and/or establish security control procedures for service contract personnel.</td>
<td>Required.</td>
</tr>
<tr>
<td>Construction/Renovation:</td>
<td></td>
</tr>
<tr>
<td>Install mylar film on all exterior windows (shatter protection)</td>
<td>Recommended.</td>
</tr>
<tr>
<td>Review current projects for blast standards</td>
<td>Required.</td>
</tr>
<tr>
<td>Review/establish uniform standards for construction</td>
<td>Required.</td>
</tr>
<tr>
<td>Establish new design standard for blast resistance</td>
<td>Recommended.</td>
</tr>
</tbody>
</table>
### B.1 Perimeter Security

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of Facility Parking</td>
<td>Access to government parking should be limited where possible to government vehicles and personnel. At a minimum, authorized parking spaces and vehicles should be assigned and identified.</td>
</tr>
<tr>
<td>Control of Adjacent Parking</td>
<td>Where feasible, parking areas adjacent to federal space should also be controlled to reduce the potential for threats against Federal facilities and employee exposure to criminal activity.</td>
</tr>
<tr>
<td>Avoid Leases Where Parking Cannot Be Controlled</td>
<td>Avoid leasing facilities where parking cannot be controlled. If necessary, relocate offices to facilities that do provide added security through regulated parking.</td>
</tr>
<tr>
<td>Lease Should Provide Control for Adjacent Parking</td>
<td>Procedures should be established and implemented to alert the public to towing policies, and the removal of unauthorized vehicles.</td>
</tr>
<tr>
<td>Post Signs and Arrange for Towing Unauthorized Vehicles</td>
<td>Procedures should be established for identifying vehicles and corresponding parking spaces (placard, decal, card key, etc.)</td>
</tr>
<tr>
<td>ID System and Procedures for Authorized Parking</td>
<td>Effective lighting provides added safety for employees and deters illegal or threatening activities.</td>
</tr>
<tr>
<td>Adequate Lighting for Parking Areas</td>
<td>Standard safety code requirement in virtually all areas. Provides for safe evacuation of buildings in case of natural disaster, power outage, or criminal/terrorist activity.</td>
</tr>
<tr>
<td>CCTV Surveillance Cameras With Time Lapse Video Recording</td>
<td>Twenty-four hour CCTV surveillance and recording is desirable at all locations as a deterrent. Requirements will depend on assessment of the security level for each facility. Time-lapse video recordings are also highly valuable as a source of evidence and investigative leads.</td>
</tr>
<tr>
<td>Post Signs Advising of 24 Hour Video Surveillance</td>
<td>Warning signs advising of twenty-four hour surveillance act as a deterrent in protecting employees and facilities.</td>
</tr>
<tr>
<td>Lighting</td>
<td>Standard safety code requirement in virtually all areas. Provides for safe evacuation of buildings in case of natural disaster, power outage, or criminal/terrorist activity.</td>
</tr>
<tr>
<td>Physical Barriers</td>
<td>This security measure will only be possible in locations where the Government controls the property and where physical constraints are not present. (barriers of concrete and/or steel composition)</td>
</tr>
<tr>
<td>Extend Physical Perimeter, With Barriers</td>
<td>Desirable to prevent unauthorized vehicle access.</td>
</tr>
<tr>
<td>Parking Barriers</td>
<td>Desirable to prevent unauthorized vehicle access.</td>
</tr>
</tbody>
</table>

### B.2 Entry Security

#### Receiving/Shipping

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Receiving/Shipping Procedures (Current)</td>
<td>Audit current standards for package entry and suggest ways to enhance security. After auditing procedures for receiving/shipping, implement improved procedures for security enhancements.</td>
</tr>
<tr>
<td>Implement Receiving/Shipping Procedures (Modified)</td>
<td></td>
</tr>
</tbody>
</table>

#### Access Control

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate Facility for Security Guard Requirements</td>
<td>If security guards are required, the number of guards at any given time will depend on the size of the facility, the hours of operation, and current risk factors, etc. Desirable for Level I and II facilities and may be included as lease option. Level III, IV and V facilities will have security guard patrol based on facility evaluation.</td>
</tr>
<tr>
<td>Security Guard Patrol</td>
<td>Desirable in Level I facilities, based on evaluation for Level II facilities, and required for Levels III, IV and V. Required for all facilities as part of GSA design requirements, (e.g. fire detection, fire suppression systems, etc.)</td>
</tr>
<tr>
<td>Intrusion Detection System With Central Monitoring Capability</td>
<td></td>
</tr>
<tr>
<td>Upgrade to Current Life Safety Standards</td>
<td></td>
</tr>
</tbody>
</table>

#### Entrances/Exits

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Ray and Magnetometer at Public Entrances</td>
<td>May be impractical for Level I and II facilities. Level III and IV evaluations would focus on tenant agencies, public interface, and feasibility. Required for Level V.</td>
</tr>
<tr>
<td>Require X-Ray Screening of all Mail/Packages</td>
<td>All packages entering building should be subject to x-ray screening and/or visual inspection.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition/description</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
</tr>
<tr>
<td>High Security Locks</td>
<td>Any exterior entrance should have a high security lock as determined by GSA specifications and/or agency requirements.</td>
</tr>
</tbody>
</table>

### B.3 Interior Security

**Employee/Visitor Identification**

- **Agency Photo ID for all Personnel Displayed At All Times.** May not be required in smaller facilities.
- **Visitor Control/Security System**
  - Visitors should be readily apparent in Level I facilities.
  - Other facilities may ask visitors to sign-in with a receptionist or guard, or require an escort, or formal identification/badge.
- **Visitor ID Accountability System**
  - Stringent methods of control over visitor badges will ensure that visitors wearing badges have been screened and are authorized to be at the facility during the appropriate time frame.
- **Establish ID Issuing Authority**
  - Develop procedures and establish authority for issuing employee and visitor IDs.

**Utilities**

- **Prevent Unauthorized Access to Utility Areas.** Smaller facilities may not have control over utility access, or locations of utility areas. Where possible, assure that utility areas are secure and that only authorized personnel can gain entry.
- **Provide Emergency Power To Critical Systems.** Tenant agency is responsible for determining which computer and communication systems require back-up power. All alarm systems, CCTV monitoring devices, fire detection systems, entry control devices, etc. require emergency power sources. (Alarm Systems, Radio Communications, Computer Facilities, Etc.)

**Occupant Emergency Plans**

- **Examine Occupant Emergency Plan (OEP) and Contingency Procedures Based on Threats.** Review and update current OEP procedures for thoroughness. OEPs should reflect the current security climate.
- **Assign and Train OEP Officials**
  - Assignment based on GSA requirement that largest tenant in facility maintain OEP responsibility. Officials should be assigned, trained and a contingency plan established to provide for the possible absence of OEP officials in the event of emergency activation of the OEP.
- **Annual Tenant Training**
  - All tenants should be aware of their individual responsibilities in an emergency situation.

**Day Care Center**

  - If a facility is being considered for a day care center, an evaluation should be made based on the risk factors associated with tenants and the location of the facility.

### B.4 Security Planning

**Intelligence Sharing**

- **Establish Law Enforcement Agency/Security Liaisons.** Intelligence sharing between law enforcement agencies and security organizations should be established in order to facilitate the accurate flow of timely and relevant information between appropriate government agencies. Agencies involved in providing security must be part of the complete intelligence process.
- **Review/Establish Procedures for Intelligence Receipt/Dissemination.** Determine what procedures exist to ensure timely delivery of critical intelligence.
  - Review and improve procedures to alert agencies and specific targets of criminal/terrorist threats. Establish standard administrative procedures for response to incoming alerts. Review flow of information for effectiveness and time critical dissemination.
  - To facilitate communication, standardized terminology for Alert Levels should be implemented. (Normal, Low, Moderate, and High—As recommended by Security Standards Committee)

**Training**

- **Conduct Annual Security Awareness Training.** Provide security awareness training for all tenants. At a minimum, self-study programs utilizing videos, and literature, etc. should be implemented. These materials should provide up-to-date information covering security practices, employee security awareness, and personal safety, etc.
Establish Standardized Armed And Unarmed Guard Qualifications/Training Requirements.

Requirements for these positions should be standardized government wide.

Do Not Co-Locate High/Low Risk Agencies

To capitalize on efficiencies and economies, agencies with like security requirements should be located in the same facility if possible. Low risk agencies should not take on additional risk by being located with high risk agencies.

Establish Flexible Work Schedule in High Threat/High Risk Area to Minimize Employee Vulnerability to Criminal Activity.

Flexible work schedules can enhance employee safety by staggering reporting and departure times. As an example flexible schedules might enable employees to park closer to the facility by reducing the demand for parking at peak times of the day.

Arrange for Employee Parking In/Near Building After Normal Work Hours.

Minimize exposure to criminal activity by allowing employees to park at or inside the building.

Conduct Background Security Checks and/or Establish Security Control Procedures for Service Contract Personnel.

Establish procedures to ensure security where private contract personnel are concerned. Procedures may be as simple as observation or could include sign-in/escort. Frequent visitors may necessitate a background check with contractor ID issued.

Install Mylar Film on All Exterior Windows (Shatter Protection).

Application of shatter resistant material to protect personnel and citizens from the hazards of flying glass as a result of impact or explosion.

Review Current Projects For Blast Standards.

Design and construction projects should be reviewed if possible, to incorporate current technology and blast standards. Immediate review of ongoing projects may generate savings in the implementation of upgrading to higher blast standards prior to completion of construction.

Review/Establish Uniform Standards For Construction.

Review/Establish New Design Standard for Blast RESISTANCE.

In smaller facilities or those that lease space, control over design standards may not be possible. However, future site selections should attempt to locate in facilities that do meet standards. New construction of government controlled facilities should review, establish, and implement new design standards for blast resistance.

Establish Street Set-Back for New Construction.

Every foot between a potential bomb and a building will dramatically reduce damage and increase the survival rate. Street set-back is always desirable, but should be used in conjunction with barriers in Level IV and V facilities.

APPENDIX B TO PART 1234—ALTERNATIVE CERTIFIED FIRE-SAFETY DETECTION AND SUPPRESSION SYSTEM(S)

1. General. This Appendix B contains information on the Fire-safety Detection and Suppression System(s) tested by NARA through independent live fire testing that are certified to meet the requirement in §1234.12(s) for storage of Federal Records. Use of a system specified in this appendix is optional. A facility may choose to have an alternate fire-safety detection and suppression system approved under §1234.32.

2. Specifications for NARA facilities using 15 foot high records storage. NARA fire-safety systems that incorporate all components specified in paragraphs 2.a. through n. of this appendix have been tested and certified to meet the requirements in §1234.12(s) for an acceptable fire-safety detection and suppression system for storage of Federal records.

   a. The records storage height must not exceed the nominal 15 feet (±3 inches) records storage height.

   b. All records storage and adjoining areas must be protected by automatic wet-pipe
sprinklers. Automatic sprinklers are specified herein because they provide the most effective fire protection for high piled storage of paper records on open type shelving.

c. The sprinkler system must be rated at no higher than 285 degrees Fahrenheit utilizing quick response (QR) fire sprinkler heads and designed by a licensed fire protection engineer to provide the specified density for the most remote 1,500 square feet of floor area at the most remote sprinkler head in accordance with NFPA 13 (incorporated by reference, see §1234.3). For facilities with roofs rated at 15 minutes or greater, provide 4 QR sprinklers rated at no higher than 285 degrees Fahrenheit. For new construction and replacement sprinklers, NARA recommends that the sprinklers be rated at 165 degrees Fahrenheit. Installation of the sprinkler system must be in accordance with NFPA 13 (incorporated by reference, see §1234.3).

d. Maximum spacing of the sprinkler heads must be on a 10-foot grid and the positioning of the heads must provide complete, unobstructed coverage, with a clearance of not less than 18 inches from the top of the highest stored materials.

e. The sprinkler system must be equipped with a water-flow alarm connected to an audible alarm within the facility and to a continuously staffed fire department or an Underwriters Laboratory approved central monitoring station (see UL 827 (incorporated by reference, see §1234.3)) with responsibility for immediate response.

f. A manual fire alarm system must be provided with a Underwriters Laboratory approved (grade A) central monitoring station service or other automatic means of notifying the municipal fire department. A manual fire alarm pull station must be located adjacent to each exit. Supplemental manual alarm stations are permitted within the records storage area to be reached by a 50-foot hose stream from a 100-foot hose lay.

g. All water cutoff valves in the sprinkler system must be equipped with automatic closure alarm (tamper alarm) connected to a continuously staffed station, with responsibility for immediate response. If the sprinkler water cutoff valve is located in an area used by the public, in addition to the tamper alarm, the valves must be provided with frangible (easily broken) padlocks.

h. A dependable water supply free of interruption must be provided including a continuous site fire loop connected to the water main and sized to support the facility with only one portion of the fire loop operational. This normally requires a backup supply system having sufficient pressure and capacity to meet both fire hose and sprinkler requirements for 2-hours. A fire pump connected to an emergency power source must be provided in accordance with NFPA 20 (incorporated by reference, see §1234.3), when adequate water pressure is not assured. In the event that public water mains are not able to supply adequate volumes of water to the site, on-site water storage must be provided.

i. Interior fire hose stations equipped with a 1 1/2 inch diameter hose may be provided in the records storage areas if required by the local fire department, enabling any point in the records storage area to be reached by a 50-foot hose stream from a 100-foot hose lay. If provided, these cabinets must be marked “For Fire Department Use Only.”

j. Where fire hose cabinets are not required, fire department hose outlets must be provided at each floor landing in the building core or stair shaft. Hose outlets must have an easily removable adapter and cap. Threads and valves must be compatible with the local fire department’s equipment. Spacing must be so that any point in the record storage area can be reached with a 50-foot hose stream from a 100-foot hose lay.

k. In addition to the designed sprinkler flow demand, 500 gpm must be provided for hose stream demand. The hose stream demand must be calculated into the system at the base of the main sprinkler riser.

l. Fire hydrants must be located within 250 feet of each exterior entrance or other access to the records storage facility that could be used by firefighters. Each required hydrant must provide a minimum flow capacity of 500 gpm at 20 psi. All hydrants must be at least 50 feet away from the building walls and adjacent to a roadway usable by fire apparatus. Fire hydrants must have at least two, 2 1/2 inch hose outlets and a pumper connection. All threads must be compatible with local standards.

m. Portable water-type fire extinguishers (2 1/2 gallon stored pressure type) must be provided at each fire alarm striking station. The minimum number and locations of fire extinguishers must be as required by NFPA 10 (incorporated by reference, see §1234.3).

n. Single level catwalks without automatic sprinklers installed underneath may be provided in the service aisles if the edges of all files in the front boxes above the catwalks are stored perpendicular to the aisle (to minimize files exfoliation in a fire). Where provided, the walking surface of the catwalks must be of expanded metal at least .09-inch thickness with a 2-inch mesh length. The surface opening ratio must be equal or greater than 0.75. The sprinkler water demand for protection over bays with catwalks where records above the catwalks are not perpendicular to the aisles must be calculated hydraulically to give .30 gpm per square foot for the most remote 2,000 square feet.