

Environmental Standards for Museum Property

Standard	Applies to:	Remember:	What to do:	Tools:	More help?
Temperature 65-74 degrees °F	All types of museum property, but especially: <i>Metals</i> <i>Art</i> <i>Documents (paper and other)</i> <i>Human remains</i>	Significant damage to museum property usually occurs as a result of expansion and contraction of materials caused by rapid changes in and extreme temperatures.	Keep storage areas that contain museum property cool and dry. If a storage area is subject to rapid temperature change, move the objects to a more temperature stable area.	Track temperature with hygrothermographs or museum data loggers	Contact your: Regional Historic Preservation Officer (RHPO), National Curator, Center Curator Check out our museum property online course or other DOI-sponsored training.
Relative Humidity (RH) below 65%; above 35%	All types of museum property, but especially: <i>Metals</i> <i>Art</i> <i>Documents (paper and other)</i> <i>Human remains</i>	Maintain relative humidity at stable levels to avoid extreme levels and wide fluctuations. Acceptable ranges and limits of relative humidity must be established for each unit based on the local climate, the nature and condition of the materials in the collection, the relative humidity levels to which the materials have been acclimatized, and the structure housing museum property.	Reduce fluctuations in relative humidity; it should not exceed fluctuations of 3% per month. Maintain relative humidity levels below 65% RH to reduce the potential for mold growth and above 35% RH to maintain the moisture content of organic materials.	museum data loggers	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or other DOI-sponsored training.
Light 50 lux (5 foot-candles) 200 lux (20 foot-candles) 300 lux (30 foot-candles)	All types of museum property, but especially: Any objects that are on display or used in exhibits and documents (paper, photographs, etc.)	50 lux (5 foot-candles) for especially light-sensitive materials (e.g., dyed and treated organic material, textiles, watercolors, tapestries, prints and drawings, manuscripts, leather, wallpapers, natural history specimens such as botanical specimens, fur and feathers, and certain types of	Most of the museum property at duty stations should be kept out of any direct light source. This is most critical for the kinds of objects identified in column 2. No light for objects in a storage facility. If the storage space uses or admits a lot of light, consider moving the museum objects.	Lighting FAQ	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or other DOI-

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		<p>photographs).</p> <p>200 lux (20 foot-candles) for undyed and untreated organic materials, oil and tempera paintings, and finished wooden surfaces.</p> <p>Other materials are generally less sensitive to light and may be exposed to higher levels, up to a maximum of 300 lux (30 foot-candles). However, when these materials are housed with light-sensitive materials, it is important to maintain levels appropriate for the most sensitive materials.</p>			sponsored training.
Ultraviolet (UV) Radiation less than 75 microwatts per lumen	All types of museum property, but especially: Any objects that are on display or used in exhibits and documents (paper, photographs etc.)	Units must monitor and record UV radiation from all sources. If the UV radiation level exceeds 75 microwatts per lumen, UV-filtering material must be installed between the light source and museum property. Levels must be monitored and recorded to ensure that the filtering material is effective.	Most light gives off UV radiation and heat. Units should make sure that any lights that are used around museum exhibits or in storage areas are filtered to reduce UV radiation or changed to a light source that emits less UV radiation.	Lighting FAQ	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or other DOI-sponsored training.
Pests In general, insects, rodents, and snakes are a few examples. Will vary based on geographic	All types of museum property	An Integrated Pest Management (IPM) plan must be established and implemented in all spaces housing museum property to protect the property from pest damage and to reduce the amount of pesticides used. An IPM plan is required in 411 DM	Monitor areas where museum property is stored. Use traps or visual monitoring and record any pests that are encountered. If objects are stored in a high traffic area for pests, or in areas with reduced temperature and humidity control, move the objects to a more	National Park Service (NPS) Museum Pest Guidance Service Pest Management policy (569 FW 1)	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or

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location		for all units housing museum property.	environmentally sound location or add in the appropriate safeguards against the pests.		other DOI-sponsored training.
Security	All types of museum property	Access to storage, exhibit, and administrative spaces housing museum property must be secured to prevent unauthorized entry and use. Where applicable, the unit must use a visitor and researcher sign-in log to record the visitor's name, address, the date and time entered, the time left, and the purpose for access to the collection. Units will prepare procedures for opening, closing, and using storage areas and exhibits. If appropriate to the collection, mechanical and electronic systems must be in place to prevent unauthorized entry.	Develop process for access to exhibits and collections. Monitor who has access and review as needed. If collections are in an area that does not have security monitoring, move them to an area that does. Include information on security in the unit's Emergency Museum Management Plan.	Smithsonian guidance on museum security NPS Museum Handbook Security and Fire and Emergency planning guidance Service Emergency Management policy (090 FW 1 and 2) NPS Sample Museum Emergency Management Plan	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or other DOI-sponsored training.
Fire Protection	All types of museum property	Units are required to install appropriate systems, structures, and equipment to detect and suppress fire in storage areas and exhibits. Museum records must be stored in an appropriate fire- and burglary-resistant container or vault, and locked when not in use. Flammable liquids must not be stored in a museum property storage area.	Monitor any areas that exhibit or house museum collections for fire/heat changes. Consider moving any collections stored in un-monitored locations to those locations that are monitored. Include information on fire protection in the unit's Emergency Museum Management Plan.	NPS Museum Handbook Security and Fire guidance NPS Sample Museum Fire Protection Plan	Contact your: RHPO , National Curator, Center Curator Check out our museum property online course or other DOI-sponsored training.
Housekeeping	All types of museum property	Museum property storage areas and exhibits must be cleaned on a regular schedule. Smoking,	Monitor areas and keep them clean. If your exhibit or storage area is close to a common area or an eating	Sample Museum Housekeeping Plan from Minnesota	Contact your: RHPO , National Curator,

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		drinking, eating, and live plants are prohibited in storage and exhibit areas. Units must prepare general procedures on handling and housekeeping in a Housekeeping Plan.	area, make sure all refuse is removed daily. Maintain a regular janitorial schedule for these areas. Controlled access for janitorial staff is advised. Maintenance should include regular updates to any filters (HVAC).	Historical Society	Center Curator Check out our museum property online course or other DOI-sponsored training.