

Royal Cornwall Museum, Royal Institution of Cornwall

GENERAL GUIDELINES FOR DISPLAY OF ARCHAEOLOGICAL MATERIALS

These guidelines draw on various standards already in existence in the museum profession, such as the Museums and Galleries Commission's *Standards in the Museum Care of Archaeological Collections* and *Levels of Collections Care*, and English Heritage's *Eligibility Criteria for the Storage of Archaeological Material*.

Environment

It is necessary to consider carefully the environment within which any material is to be displayed. Some materials are more stable than others and therefore require a less closely controlled environment. Other materials are inherently unstable and thus require a more carefully controlled environment. The principal areas to be considered are the temperature, relative humidity and light levels. Standards have been set for the display of archaeological material which, as a registered Museum Service, we aim to achieve within our own displays and which we are not prepared to compromise when lending to other institutions.

The requirements are given in the list attached.

Where necessary to control the environment, humidifiers and dehumidifiers may be used, or the environment within a case controlled using buffering material, such as silica gel or artsorb.

Fluctuations in relative humidity can be very damaging and in addition to keeping relative humidity within a given range, fluctuations within the range must be kept to a minimum. We require borrowers to provide records of the environment in the proposed display area.

Light levels must also be controlled. Cases must be positioned away from direct sunlight and for all types of archaeological material it is recommended that light levels are no greater than 300 lux. For some materials levels will need to be lower, e.g., objects with pigmented surfaces will have to be displayed at 50 lux. Blinds should be fitted to windows, or curtains drawn, if required to prevent direct sunlight falling on a case, and windows should be coated with ultra violet absorbing film to remove the harmful UV radiation from the light. Fluorescent lights should have UV absorbing sleeves put over the tubes to cut out all the UV from the light emitted.

Cases

Cases must be well built, secure, well sealed and made of materials up to MGC standard, which will not be harmful to any archaeological material displayed in them. Advice should be sought from staff at the City Museum on this or the upgrade of cases to meet required standards for particular materials.

The thickness of the glass must meet current health and safety standards or be coated with plastic film to render it safe if broken. Ideally security glass should be fitted of the appropriate thickness.

If the material to be displayed warrants it, cases should be fitted with an alarm. Some objects will only be lent if the display case is alarmed.

The Venue

If Royal Cornwall Museum material is to be displayed in any venue other than a recognized museum, Royal Cornwall Museum retains the right to visit the venue in advance to assess its suitability, before making a decision on whether to lend.

A standard Facilities Report Form, produced by the United Kingdom Registrar's Group is usually sent out to borrowing institutions, requesting information on a number of subjects in order to assess whether specific criteria can be met. See enclosed copy.

Security

Any building where material on loan is to be displayed must be secure and alarmed. The building should be patrolled or have a regular human physical presence – preferably on a daily basis. If an institution is closed over a long period of time, the loan will need to be returned during the closed season.

A Loan Agreement

A loan agreement will be signed by the borrowing institution. The condition of any object will be assessed and recorded before it is released from Royal Cornwall Museum and its condition will be checked on return. In the event of damage, or a change in condition during the period of loan, the Archaeological Curator, Royal Cornwall Museum, should be notified as soon as possible. No object is to be cleaned or in any way conserved while on loan. Only an accredited museum curator or conservator may handle objects on loan.

The period of loan will be agreed in advance and the loan agreement will state the environmental requirements for display.

Objects on loan are to be insured by the borrower.

Packing Material

The objects being borrowed will be packed by Royal Cornwall Museum for transport. Any packing materials should be retained so that they can be re-used when the objects are returned. Packing materials must be kept in an area free of risk of infestation by museum pests such as moth and carpet beetle, and in a suitable environment, e.g. not damp.

Disaster Planning

The borrowing institution must have considered what action would be taken in the event of an emergency.

RELATIVE HUMIDITY, TEMPERATURE AND LIGHT LEVELS FOR THE DISPLAY OF ARCHAEOLOGICAL MATERIAL*

Any figures given below are intended as a guide – it is understood that conditions may vary. Every effort must be made to reduce fluctuation of r.h. to a minimum

Metalwork

1. Non-ferrous, i.e. metals which do not contain iron such as copper, tin, silver and alloys such as bronze and pewter

Optimum ambient temperature - 18° C (Min. 10°, Max 25°)

Optimum ambient relative humidity - 50% (when stored/ displayed with other materials)
35% (dedicated metal display/storage)
Less than 35% where a microclimate is necessary (see below)

Active decay may be indicated by tarnishing – blackening/whitening of surfaces or powdering (in the case of copper alloys this may be bright blue/green)

Where materials are unstable it is likely that a dedicated microclimate be provided where humidity levels are strictly controlled, eg. object stored/displayed in a sealed box with silica gel. The greater the degree of fluctuation in temp. /r.h. the more likely that a microclimate be required to minimize any damage likely to be caused by the fluctuation.

2. Ferrous, e.g. iron

Optimum ambient temperature - 18° C (Min. 10°, Max 25°)

Optimum ambient relative humidity - 50% (when stored/ displayed with other materials)
35% (dedicated metal display/storage)
Less than 15% where a microclimate is necessary

Active decay may be indicated by the appearance of fresh corrosion products (rust), weeping or cracking.

Organic Materials – e.g. bone, leather, wood

Optimum ambient temperature - 18° C (Min. 10°, Max 25°)

Optimum ambient relative humidity - 50% (when stored/ displayed with other materials)
Microclimates should only be provided after taking advice from a conservator

Active decay may be indicated by mould and fungus growth, cracking, warping, flaking

Waterlogged & Wet Stored Materials

Optimum ambient temperature - 10° C (cool and dark and above freezing)

Optimum relative humidity - 100% provided by a microclimate

Active decay may be indicated by embrittlement, shrinkage, drying out, breakdown of adhesives, fading, bleaching

Inorganic Materials – e.g. pot, stone, glass

Optimum ambient temperature - 18° C (Min. 10°, Max 25°)

Optimum ambient relative humidity - 50% (when stored/ displayed with other materials)

Active decay may be indicated salting/ crystals on surface of pottery, flaky glazes, powdering surfaces. Glass may weep, produce fine cracks or become opaque.

Where objects are made out of several types of material, advice should be sought from a museum conservator. Usually display/storage conditions are determined by the most unstable and/or archaeologically significant part of the object.

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* These guidelines are based directly upon those outlined in *Standards in the Museum care of Archaeological Collections* 1992 - Museums & Galleries Commission and a document produced by Bristol Museum and Art Gallery.