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**COLLECTIONS CONSERVATION & CARE**

**STANDARDS AND GUIDELINES FOR DEVELOPMENT AND CONSTRUCTION OF EXHIBITIONS, DISPLAYS AND**

**GALLERY REFURBISHMENT**

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**Louise Bacon**

**Head Collections Conservation & Care**

**HORNIMAN MUSEUM & GARDENS**

**COLLECTIONS CONSERVATION & CARE**

**STANDARDS AND GUIDELINES**

**FOR DEVELOPMENT AND CONSTRUCTION OF EXHIBITIONS, DISPLAYS AND**

**GALLERY REFURBISHMENT**

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**Introduction to Standards**

The standards and guidelines have been drawn up to act as a guide for Museum staff, Exhibition Designers and Contractors and must be taken into consideration when planning the development, construction and execution of Exhibitions, Displays or Gallery Refurbishments whether TEMPORARY or PERMANENT or subject to budget.

The main objective of this document is to cover most of the CONSERVATION and ENVIRONMENTAL issues at an early stage in the development of a Project.

As with all policies the Standards and Guidelines in this document will be reviewed periodically and updated.

The Standards and Guidelines form part of one of the Museum's primary objectives, that of Collections, which states “we will safeguard and develop the collections so that they can be made as accessible as possible now and into the future”

Horniman Museum & Gardens Corporate Plan 2016-2019

This is supported through the Collections Conservation & Care Policy 2002

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**Glossary**

Throughout the document the following short terms have been used to signify:

Object(s): Any specimen, artefact, object registered by the Museum

Display: Exhibition, display or Gallery Refurbishment

Conservation: Conservation Manager

Exhibitions: Head of Exhibitions & Design

Facilities: Estates Manager

Collections: Collections Manager

SCC: Study Collections Centre

Engineer: Relates mainly to Mechanical and Electrical Works

M&E: Mechanical & Electrical

For Further Information on the Standards please contact:

Conservation Manager

The Horniman Museum & Gardens

 100 London Road

 Forest Hill

 London SE23 3PQ

Tel No: 020 8291 8682

Email: www.enquiries@horniman.ac.uk

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 **No.1 Handling Museum Objects**

**Standard**

**All actions must minimise the movement and handling of objects.**

**No person should handle museum specimens unless they have received suitable object handling training provided by Conservation.**

**Health & Safety Risk Assessments may be required before any object is moved.**

**No smoking, eating or drinking except in designated areas.**

**Guidelines**

Among the many causes for the deterioration of museum objects are light, temperature, humidity, vibration, dust and noxious chemicals. Environmental hazards are insects, rodents, fungus, biotic organisms and by far the greatest cause of destruction, people.

All objects must be handled by approved and trained Museum staff or their approved representatives. Approval and training is dependent on Conservation. (see **Appendix III.)**

****Storage and laying out space for objects to be included in a display is limited at both the SCC and the Horniman Museum and must be taken into consideration in any planning programme. Spaces should be booked through Collections Management or Conservation

****Identification of the contents of boxes or items under covers should be possible without the removal of the object for examination.

****Viewing of objects at the SCC, or the Museum, as well as movement between the two sites necessitates the following steps:

 Retrieving object (handling & movement)

 Packing (handling & movement)

 Transportation (movement & vibration

 whether across the room or by

 vehicle)

**No.1 Handling Museum Objects contd.**

Unpacking (handling & movement)

Arranging object for viewing (handling & movement)

Re-packing (handling & movement)

Transportation (movement & vibration)

Re-locating object (handling & movement)

Consequently a planned programme of handling 'sessions’ for whole Project i.e. from inception through progressing the design, to conservation treatment and installation must be presented and approved by Exhibitions, Conservation and Collections and any other Section in the museum who is relevant to the process. In this way different sessions can be programmed to run concurrently or in logical sequence. The programme must be carefully planned so as to minimise the number of times an object is moved and handled.

During installation, consideration must be given to where objects can be held in a 'safe area' while mounting and fixing takes place.

'Safe areas' must be designated and form part of the planned programme of handling 'sessions' for example during the installation of the object(s) on display or during viewing sessions. A 'safe area' must primarily provide protection against damage, dust and theft. A ‘safe area’ needs to be approved by Conservation. Facilities would need to be consulted on security issues. (see also No.6 **Open Displays)**

At least 24 hours must be allowed for some objects that have been transported between the SCC and the Horniman Museum to acclimatise to new spaces before unpacking e.g. ivory.

Objects must be carried in a supporting container at all times unless size dictates otherwise. Conservation to advise and train approved personnel as required. Health & Safety manual handling training may also be required.

**No.1 Handling Museum Objects contd.**

 When not being viewed objects must be protected from dust and covered with acid free tissue paper, Tyvek (spun bonded polyethylene) or other covering as specified by Conservation. ‘Object Underneath’ labels are available from Conservation and should be used.

 Floor loading capacities and the allowance of suitable access to move objects in and out of the Gallery must be considered. Health & Safety Risk Assessments may also be required.

 Objects should neither be subjected to undue vibration or shock nor extremes of temperature, humidity and light. (Conservation to advise)

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**No.2 Gallery Refurbishment**

**Standard**

**Any adaptations to the fabric, running of trunking, ductwork or any other fixtures or changes must take into consideration the status of the Grade II \* Listed Building.**

**Guidelines**

 Facilities/Exhibitions may require security/alarm installations. Care must be taken to avoid installing systems with conflicting radio frequencies to the Hanwell environmental monitoring system ( mHz)

****Any materials such as carpet, insulation, floor adhesives etc. must be tested and approved by Conservation **(see No. 8 Testing Materials and Off-gassing)**

 Any building works, such as plastering, painting or laying screed must be allowed time to dry out. **(see No. 8 Testing Materials and Off-Gassing)**

1. Any changes to climate control provision must be carried out in consultation with Conservation, Facilities, Exhibitions.

 Floor loading capacities and the allowance of suitable access to move objects, equipment and materials in and out of the galleries must be considered (**see Appendix II**).

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**No.3 Specification for Design of Showcases.**

**Standards**

**Museum showcases need to provide a sturdy, secure environment as free as possible from dust, pests, pollution and heat. They must also be easy to open so that the displays can be maintained and modified with ease.**

 **Guidelines**

**The specifications given below are an initial statement and should be regarded as a basis for discussion.** Designers and Contractors should work closely with Conservation, Facilities and Exhibition staff to detail showcase specification.

It is not intended to give a detailed list of materials that can or cannot be used in a Museum context; the working practices described below are for guidance only.

* Carcass Fully enclosed with separate ventilated light box.

All interior joints must be airtight.

Removable panels to be provided to any

enclosed space around or beneath showcases to allow for cleaning.

Some showcases require tight

control of their air exchange rate (see specs provided).

* Access Preferably via hinged doors.

One person should be able to open the case unaided.

* Seals to case Airtight. Seals and sealants must

be tested and approved by Conservation

**(see No. 8 Testing Materials).**

**No.3 Specifications for Design of Showcases Contd.**

Lighting Either in a separate vented box at top of or

outside showcase.

Transformer(s) outside showcase in separate ventilated space.

This should be fitted with a trim or other dust proofing method to prevent dust falling into case below.

Diffuser sheet as required.

Access by separate panel outside the showcase.

LED tails to be sealed at juncture with display volume with “O”rings (see separate sealant specs for “O” rings).

Light levels Advised by Conservation/DHA.

Lux/UV levels to be established depending on exhibits.

Light fittings Low energy.

 No direct heat.

 Avoid 'bright' spots.

 All must have electrical dimming.

Security See showcase locking specs.

Environmental Conservation Grade showcases require an

 Control accessible space for desiccants/ adsorbents. An adequate gap or grille to be provided to allow effective conditioning of internal air (see specs provided).

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**No.4 Showcase Construction Materials**

**Standard**

**High specification display case design to assist in achieving environmental standards.**

**Guidelines**

Designers and contractors should work closely with Conservation, Facilities and Exhibition staff to detail showcase specification. It is not intended to give a detailed list of materials that can or cannot be used in a Museum context; the working practices described below are for guidance only. Manufacturers frequently change specifications, 'improve' products or release new products onto the market. **(see No. 8 Testing Materials)**.

All new or renovated showcases must be allowed to ventilate with the access point open to allow for off gassing **(see Showcase specs provided).**

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**REFURBISHMENT**

**No.5 Showcase Dressing Materials**

**Standard**

**Case dressing materials must provide a stable environment for objects**

**Guidelines**

By their nature showcases are enclosed and therefore potentially destructive environments. They must provide a safe, secure, stable environment for objects which may be on display in the same space for some years. Display mounts/fittings must allow for easy access for future maintenance of displays. **(See Showcase specs provided)**

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 **No. 8 Specification for Testing Materials**

 **Standard**

 All materials proposed for use must be tested and approved.

 **Guidelines**

Many of the materials available for Exhibitions, Displays and Gallery refurbishments release acids and other vapours that can harm museum objects. The Horniman Museum has an established regime of testing all materials proposed for use. This also applies to materials long established as suitable for museum use. Manufacturers are known to change their fabrication methods and hence, current samples need to be tested. The only exception are samples from the selected suppliers that have been tested and approved by institutions such as the British Museum or Ashmolean Museum within the past 5 years.

Samples must be presented to Conservation at least 10 working weeks in advance. The tests takes four weeks and the Conservation Laboratory has limited facilities for testing materials.

Conservation will advise on Laboratories that can carry out any particularly specialised test not available at the Horniman. Such out-house costs must be borne by the Project budget.

 Information required: -Name of manufacturer

 -Name of supplier

 -Trade name of product

 -Technical MSDS/COSHH data sheet

 -At least 10g of material to be tested

 Off-Gassing

Enough time must be allowed for drying-off and off-gassing (e.g. solvents and water) from materials, particularly sealants, adhesives, paints and glazes and any building works such as plastering. The minimum time is stipulated below. In case of multiple coatings, each coat must be allowed to off gas before applying further layers

**Guidelines for off-gassing time BEFORE installation of objects**

1. 8 weeks - plaster work
* 6 weeks - solvent based paints

4 weeks - adhesives (including spray

 mounting)

 2 weeks - glazing and painting completed

 3 weeks - sealants

* 3 weeks - water based paints