

Science Museum Gallery Design Guidelines

N.B. These guidelines have been compiled by the Disability Awareness Team for new Science Museum gallery projects, to help promote consideration of accessibility throughout the design process. They should be used in conjunction with other relevant accessibility documents including Approved Document M, BS 8300:2009, CAE Designing for Accessibility and The Sign Design Guide.

Guideline	Where it should be implemented	Who it affects	Why it is necessary	Source	Priority
Lighting levels should be: <ul style="list-style-type: none">- Entrance 200lux- Enquiry desk 500lux- Circulation 100lux- Seating 100lux	Areas as specified	Majority of the 8 million disabled people in UK	To provide sufficient light for reading, viewing objects, identifying hazards and lip reading. Also to prevent related anxiety.	CIBSE guidelines on lighting	High
Avoid strong contrasts in lighting (to be further discussed with team)	Throughout gallery	People with visual impairments and mental health service users/survivors	To help prevent confusion and reduced access to information	RNIB	High
Avoid using florescent lights	Throughout gallery	People with hearing aids; people with epilepsy	This type of lighting can create buzzing in hearing aids and the flickering can lead to epileptic fits	CAE	Medium
Avoid shadows and reflections onto texts and objects (consider visitors shadows)	All objects and texts	People with visual impairments; people with learning impairments	To allow best access to information and viewing of objects	RNIB	Medium
Avoid unintentional light or dark pools of light	Throughout gallery	People with visual impairments	This creates the appearance of objects/hazards which can lead to accidents and confusion	RNIB	Medium

Avoid extensive backlit text using light boxes	All labelling and signage that gives information.	People with visual impairments; people with a learning disability	To allow best readability and avoid eye strain	RNIB	Medium
Use 'soft' surfaces where possible	Gallery wide i.e. flooring, furniture, wall coverings	People with hearing impairments; people with visual impairments; mental health service users	To help absorb sound and light and prevent excessive sound, reduce sound contamination and reduce reflections	RNIB, RNID & CAE	High
Provide induction loops in appropriate spaces (consider the use of portable systems)	Desks, show spaces and other areas where speech is vital	People with hearing aids	To allow people with hearing aids to access sound information	RNID	High
Consider ways to reduce impact of sound installations (e.g. directional speakers)	Throughout gallery	People with hearing impairments; mental health service users	To reduce noise contamination and general noise levels. This supports general hearing and reduces potential for related anxiety and confusion.	RNID	Medium
Provide captions, subtitles and BSL for audio information, with reference to interpretation strategy	Throughout gallery	People with hearing impairments	To help provide equal access to information	RNID	High
Use contrast to highlight surfaces and objects (colour, tone, texture)	Gallery wide including floors, walls, objects, buttons/ controls, furniture, ramps and steps	People with visual impairments; people with learning difficulties	To help people identify objects and hazards and navigate around space	CAE	High
Controls and buttons should be easily manoeuvred (i.e. usable with a fist) D-shaped handles and large buttons are easiest to use	Controls and buttons	People with visual impairments; people with learning difficulties; people with learning disabilities	To allow people to use interactives with ease	CAE	Medium
Provide directional arrows and simple instructions for interactives, with	Interactives	People with visual impairments; people	To avoid confusion and encourage use	CAE	Medium

reference to interpretation strategy		with learning difficulties; people with learning disabilities			
Provide least resistance to moveable objects/handles	Interactives	People with mobility impairments	To allow more people to use interactives and prevent pain	CAE	Medium
Consider having adjustable/varied heights	Interactives, screens and surfaces	People with mobility impairments	To allow people to use interactive at appropriate heights	MLA	Low/Medium
Provide handrails on steps and ramps (contrasting colours)	All steps and ramps	People with visual impairments; people with mobility impairments	To help people support themselves on changing surfaces and guide them through hazards.	CAE	High
Provide calm/quiet area	Space in gallery	Mental health service users/survivors; people with hearing impairments	To help avoid anxiety and confusion and provide space for good communication	MLA	Medium
Plan a logical room layout	Throughout gallery	Majority of the 8 million disabled people in UK	To enhance understanding, avoid confusion and avoid unnecessary waste of energy	CAE	Medium
Provide rest stops throughout gallery (seating should have arms and backs which are contrasting colours to background)	Throughout gallery	People with mobility impairments	To provide areas where people can rest if they find it difficult to stand and continue to enjoy the experience	MLA	High

These guidelines were compiled using the following documents:-

- Centre for Accessible Environments Exhibition Guidance
- Designing For Accessibility (CAE)
- See it right pack (RNIB) - www.rnib.org.uk
- The Sign Design Guide (Sign Design Society)

- RNID fact sheets – www.rnid.org.uk
- MLA resource Portfolio Guides 7 & 9 – www.mla.gov.uk

Science Museum: Accessible Text Guidelines

N.B. These guidelines have been compiled by the Disability Awareness Co-ordinator for the Science Museum consideration of accessibility throughout the design process. They should be used in conjunction with other relevant accessibility documents including; BS 8300:2009, CAE Designing for Accessibility and The Sign Design Guide.

Guideline	Where it should be implemented	Who it affects	Why it is necessary	Source	Priority
Use clear and legible typeface (preferably sans serif) to be agreed with Design Studio	All labelling and signage	People with visual impairments; people with a learning disability	Ornate text makes it difficult to distinguish the letters and therefore read the text.	RNIB & Mencap	High
Use good contrast between text and background (e.g. black on white gives best contrast) to be agreed with Design Studio	All labelling and signage	People with visual impairments; people with a learning disability	The better the contrast the better the legibility of the writing.	RNIB & Mencap	High
Letter size is dependant on viewing distance. Further details can be found in BS 8300:2009 (additional information available on request)	All labelling	People with visual impairments; people with a learning disability	Large bold print is easiest to read.	RNIB & Mencap	High
Do not overlay text onto pictures – when necessary provide block background to text so that the picture cannot be seen through the text.	All labelling and signage.	People with visual impairments; people with a learning disability	Pictures can be distracting to the eye and people with visual impairments often ignore them, as it is too difficult to distinguish letters.	RNIB & Mencap	High
Do not shape text around embedded forms	All labelling and signage.	People with visual impairments; people with a learning disability	A line of text that starts and ends in different places is difficult to follow.	RNIB & Mencap	Medium
Do not use continuous capital letters	All labelling and signage	People with visual impairments; people with a learning disability	Capital letters are harder to distinguish and	RNIB & Mencap	High

			therefore make reading more difficult.		
Use leading of at least 1.5	All labelling	People with visual impairments; people with a learning disability	Lines that are close together are difficult to distinguish.	RNIB & Mencap	High
Use consistent spaces between words	All labelling and signage	People with visual impairments; people with a learning disability	Stretched or condensed words are difficult to follow and distinguish.	RNIB & Mencap	High
Use clear margins between columns	All labelling and signage	People with visual impairments; people with a learning disability	Columns close together cause confusion as people try to follow lines horizontally across text.	RNIB & Mencap	High
Aim to avoid reflective finishes	All labelling and signage	People with visual impairments; people with a learning disability	Reflections caused by shiny finishes make text more difficult to read and puts strain on eyes.	RNIB & Mencap	High
Aim to avoid placing reflective surfaces on top of sign/label (i.e. glass)	All labelling and signage	People with visual impairments; people with a learning disability	Reflection makes text more difficult to read and puts strain on eyes.	RNIB & Mencap	Medium
Use clear and simple language (plain English, no jargon, active and personal language)	Labels, text and captions.	People with visual impairments; people with a learning disability	Complex language is harder to follow and causes confusion	RNIB & Mencap	Medium
Use 60-70 characters per line	Main texts and captions.	People with visual impairments; people with a learning disability	Very long or very short lines of text create confusion and are difficult to follow.	RNIB	Medium
Support text with images, photos or symbols	All labelling and signage - priority for orientation and essential information.	People with visual impairments; people with a learning disability	To make text easier to follow and interpret.	RNIB & Mencap	Medium
Use angled labels and captions at 45 degrees when appropriate for interpretation strategy	Captions and labels	People with visual impairments; people with a learning disability; people with mobility impairments	To provide easiest readability.	RNIB & CAE	Medium

Always consider alternative formats to support text, such as tactile information (embossed letters and raised pictograms), audio information and Braille	Consideration for all labelling and signage. Priority for orientation and essential information.	People with visual impairments; people with a learning disability; people with hearing impairments	To provide flexible information that can be accessed by all.	RNIB, CAE, RNID & Mencap	High
Provide a clear and consistent orientation system – using varied formats (Braille, audio and signage)	Gallery wide (to include facilities information such as toilets)	8 million disabled people.	To allow people to use and enjoy space independently.	RNIB, CAE, RNID & Mencap	High

These guidelines were compiled using the following documents: -

- See it right pack (RNIB) - www.rnib.org.uk
- MLA Disability Portfolio resource Guide 6 – www.mla.gov.uk
- Good Signs: Improving signs for people with a learning disability (DRC)
- Am I making myself clear? Mencap's guidelines for accessible writing - www.mencap.com
- Designing for Accessibility (Centre for Accessible Environments)