



Museum of Domestic
Design & Architecture

DREEMS

Designing a Resource Efficient Environment for a Museum Store

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Presentation Summary



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The inspiration and focus for the project.

- ? Will broadening the parameters of our HVAC settings reduce energy consumption and CO2e emissions at MoDA
- ? how can we calculate the efficacy of shelving and housing systems to protect MoDA's objects from rapid or significant fluctuations in temperature and RH

➤ Project schedule.

➤ The expected outcomes of the research.

- How DREEMS might contribute to ongoing developments in **sustainable conservation practice** in the Heritage Sector.

New Approaches to Standards



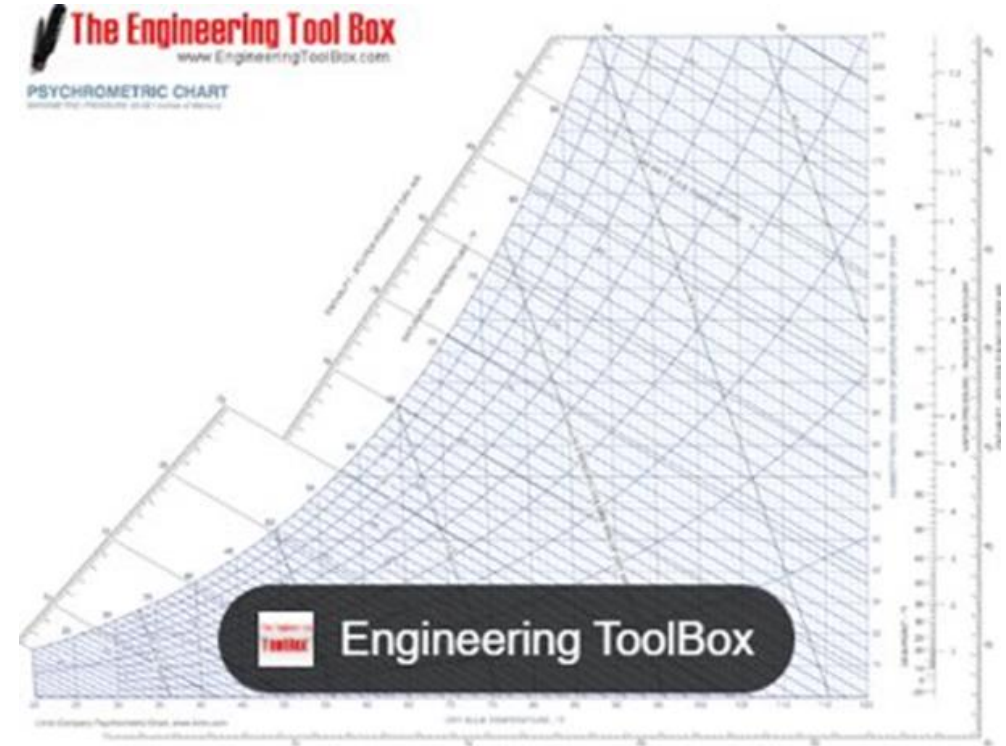
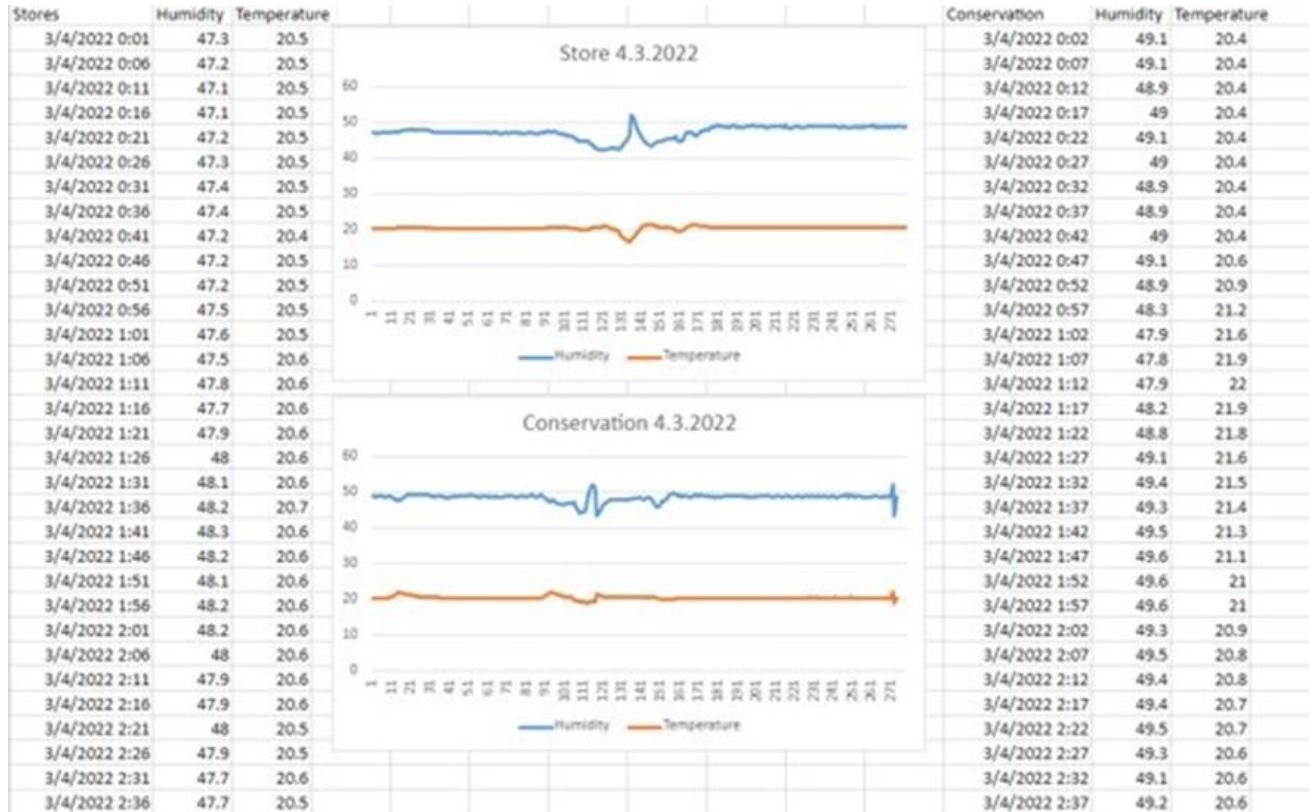
Source	RH	Temperature (°C)
Thomson Class 1	50 or 55±5	19 winter to 24 summer
Bizot	40–60 < ±10% in 24 hours	16–25
AICCM	40–60	15–25
AIC	40–60	15–25
Thomson Class 2	40–70	Reasonably stable. > 11 to avoid condensation (p. 45)

Reflections on the psychological basis for suboptimal environmental practices in conservation. Jane Henderson.
<https://doi.org/10.1080/19455224.2017.1422777>



BS EN 4971 2017 replaced BS5454 2000
Mixed Archive: Temperature 13°C - 23°C ± 1°C ave 18
Relative Humidity 35% -60% ± 5%.

Operation of current HVAC & making changes to settings



MoDA Collection Store & HVAC



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DREEMS PROJECT TIMELINE



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December 2022: calibrate all monitoring equipment & set up test to begin by 16th December 2022

January 2023-December 2023: regular logging of data - Quarterly summaries to be made available to MoDA staff and University Sustainability Team.

January 2023- June 2023: Liaising with Middlesex University Mechanical and Engineering Teams, Air-conditioning Engineers, Sustainability Manager to explore adaptations to current and future HVAC provision, including financial cost assessments.

Conclusion January 31st 2024

Summary Report and Presentations on an improved, sustainable means to control the MoDA Store environment.

Findings to be cascaded across wider museum sector via AIM report; Museums Association (eg: Museums for Climate Justice); ICON; IIC.



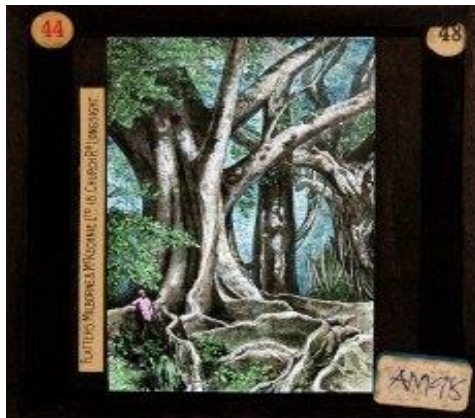
Support & Collaboration



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**The MoDA DREEMS project is supported by an
AIM Collections Care Grant**



Roots & Branch Carbon Literacy Programme
MoDA has submitted the DREEMS project as a
carbon reduction action pledge



Jane Henderson, Professor of Conservation
Phil Parkes, Reader in Conservation
Cardiff University



It is disappointing that saving heritage is being counterposed with saving the planet as there is clearly no future heritage in a burning world, but equally it's hard to accept that the very principle of saving our heritage is in conflict with saving the planet.

To that end I think we do still have more work to do to share our approaches to sustainable practise.

Jane Henderson 23.11.22

LINKS & CONTACTS



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Useful Webinars

ArtEvolve: Turn Down The Dial: Sustainable Climate Controls In Museums

<https://www.youtube.com/watch?v=oLEjlGL34Jk>

ArtEvolve: Sustainable Buildings: Reducing Energy & Carbon Costs In Culture

https://www.youtube.com/watch?v=Zad_Y6NUEAs

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