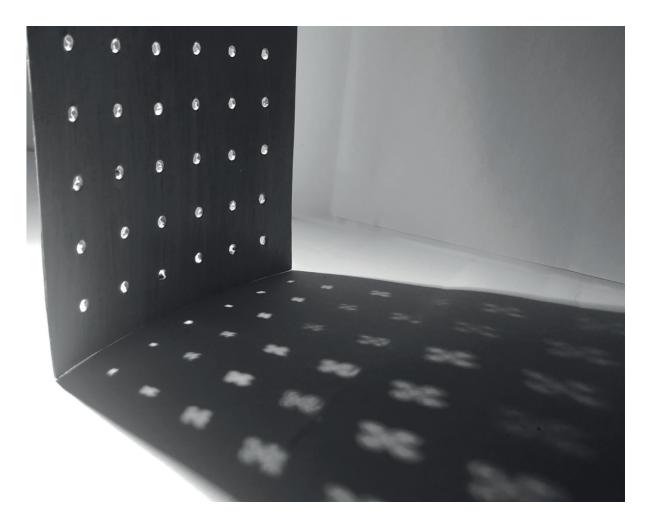


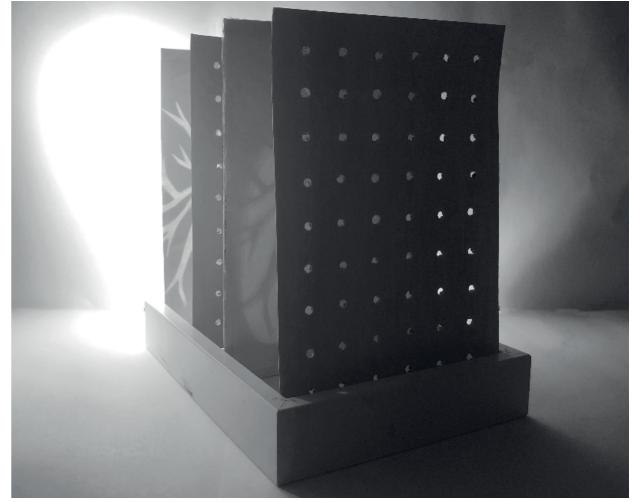
**THE ROOM** 

**SITE PHOTOGRAPHS** 

# **PERFORATIONS - CREATING PERMIABLE BOUNDARIES**

Situated in Woolwich in southeast London, The Bathway Workshop inhabits an 19th century masonry edifice. The workshop houses a design team who create scenery, upholstery, and costume for neighbouring theatre schools. Visitors are also able to visit the workshop and journey through the building to watch the creative process- there are distinct public and private domains. The workshop embodies the concept of perforations throughout, at a variety of different scales. These take form as micro perforations within acoustic panelling, small perforated architectural elements, such as furniture, larger perforated brick partitions and a perforated façade. The façade uses perforations to control solar gain within the building using layered perforated solar shades. The intention of the perforations is to maximise the user experience within the building, creating a physical, sensory, and cognitive experience. As well as this, the perforations create a very atmospheric interior that embodies both permeable and breathable qualities.



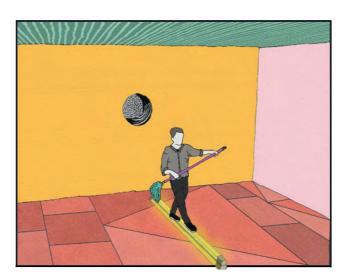


### **CONCEPTUAL MODEL**

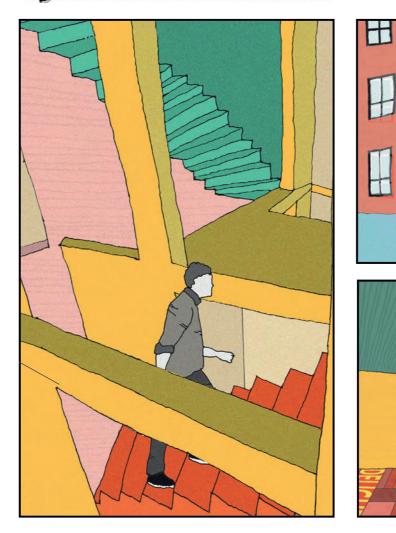






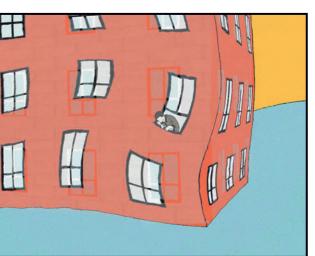






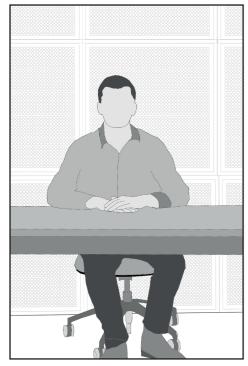


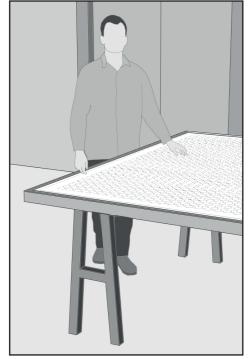






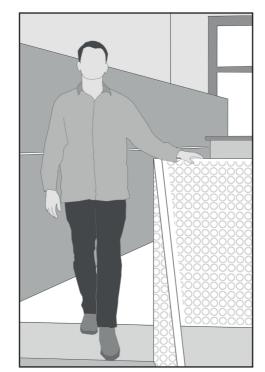




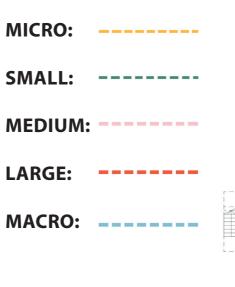


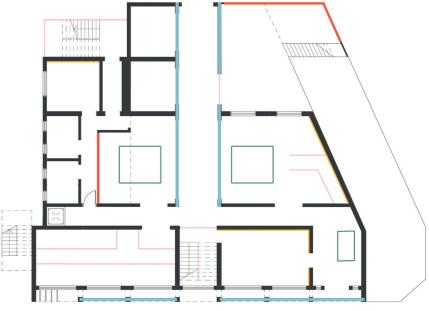
Micro: Perforated Acoustic Panels

Small: Perforated Furniture Facings

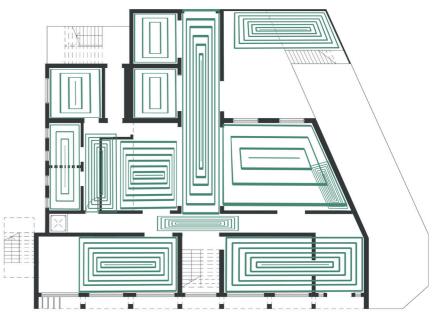


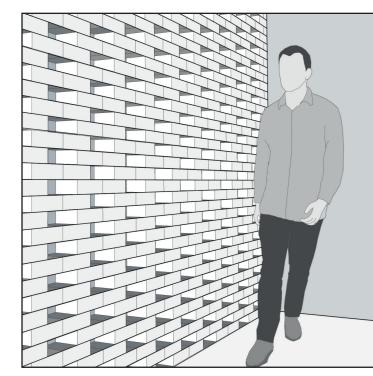
Medium: Perforated Balustrades





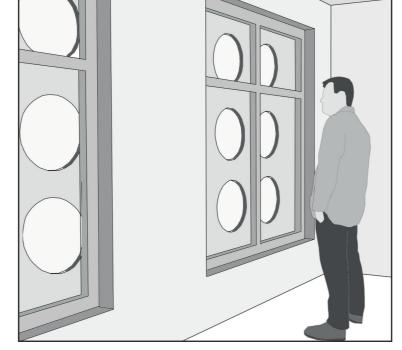
MOST BREATHABLE





Large: Perforated Brick Partitions

### SCALES OF PERFORATIONS



Macro: Perforated Solar Facade

BREATHABLE

LEAST



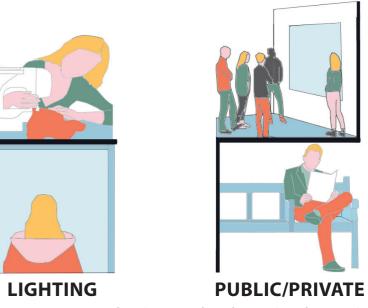




# **BREATHABLE PERFORATIONS**

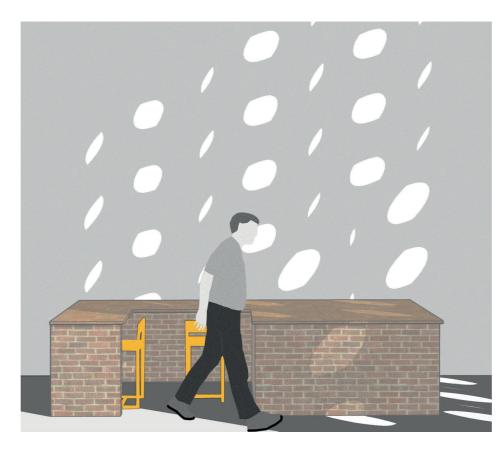
The primary concept is the application of perforated surfaces. These perforations are applied throughout the building at five different scales; micro, small, medium, large and macro. Diagram: Perforated Surfaces Locations

Diagram: Breathability

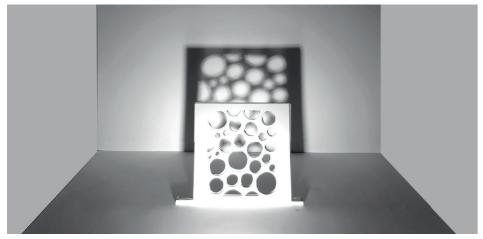


Causes for change of perforated surface scale





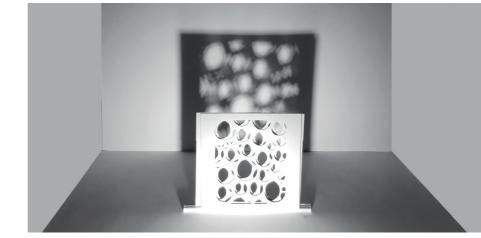




#### **OPEN: 9:00AM**

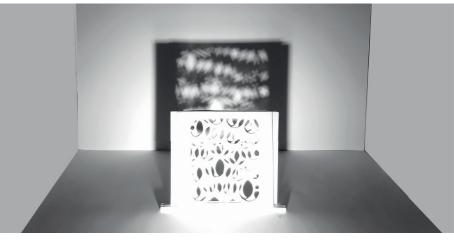
The solar shades move horizontally on steel rails. The overlap of the layered panels allows more or less light into the interior. This can help deter the glare and reflection of the sun.

### SOLAR SHADING LIGHTING STUDIES



#### **MIDWAY: 11:00AM**

The perforated panels create different lighting intensities and patterns within the interior spaces. The solar shades mainly cover the parts of the facade that occupy workshop spaces.



CLOSED: 13:00PM

The perforated facade presents the largest of the perforated surfaces within the design scheme. This macro scale surface allows a connection and dialogue between the inerior and exterior.

## **SOLAR SHADING**

The solar shading screens are motor controlled and move horizontally on rails, allowing more or less light into the space as is required. As a result, less energy is used within the building.

