

**pubfab** is a public access fabrication facility in Glasgow City Centre. The project aims to create a hub to facilitate the act of making, democratising the equipment of industry to the common maker.

Located in the Cowcaddens area of Glasgow, the facility occupies the former Glasgow Savings Bank: a wedge-shaped Edwardian Baroque building with long splayed facades and two curved corners. The site's unique shape is echoed by the triangular paved island it sits on, emphasising its monolithic appearance.

The proximity of the site to GSA's campus offers the possibility for a relationship with the institution, with potential for it to serve as an extracurricular facility for students to use alongside the public. The scope of Art School students using the facility alongside the general public furthers the notion of skill and knowledge sharing, with users gaining insight to an academic art and design curriculum through the students; and vice versa, with students potentially learning practical skills through users grounded in making.



Site Map



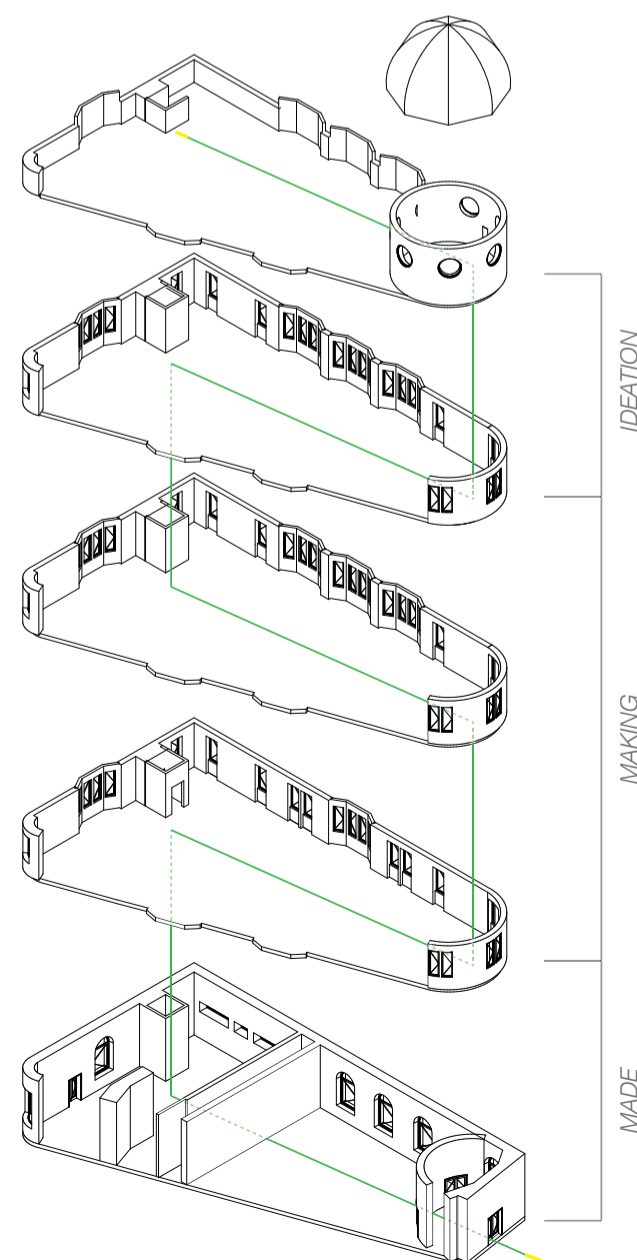
The spatial arrangement of the site is structured around a conceptual process I established early in my research; the '3 Steps of Making'.

When beginning the zoning process, I tried to break down the act of 'making' into subgenres. This proved to be counterintuitive as it disregarded one of the key aspects of the typology; the cross disciplinary nature of maker culture. I continued trying to divide workspaces by processes or materials, resulting in the same nonresult.

I instead looked at making as a whole, trying to establish a theme that was homogenous throughout the culture, regardless of discipline.

This became the establishment of a common process; the '3 Steps of Making'. Simply the three phases a maker inhabits on any given project; *Ideation*, *Making*, and *Made*.

All projects start with an idea, and what the facility aims to provide is a space for makers to see this idea become a real, tangible thing.



'Gravitational' narrative to layout.

Trickle down spatial hierarchy as projects snowball from start to finish - or top to bottom.

The 'weight' of processes also determine their position in the vertical hierarchy.

User circulation takes occupants through the process in reverse, promoting chance encounters.

IDEATION → MAKING → MADE

-BRAINSTORMING  
-PLANNING  
-ATTRACTING TO MAKING  
-RESEARCH

-PROCESSES OF CREATION  
-WORKSHOPS.  
-COLLABORATION  
-ACT OF MAKING

-FINISHED ARTIFACTS.  
-RETAIL ASPECT?  
-SHARING  
-EXHIBITION.

The linear narrative of the '3 Steps' translated well to the site's verticality. The journey starts at the top of the space with *Ideation*, and finishes at ground level with the *Made*. This takes users through the journey in reverse when circulating the space, promoting chance encounters between users of different disciplines, as well as providing an inspiring route past adjacent workspaces.

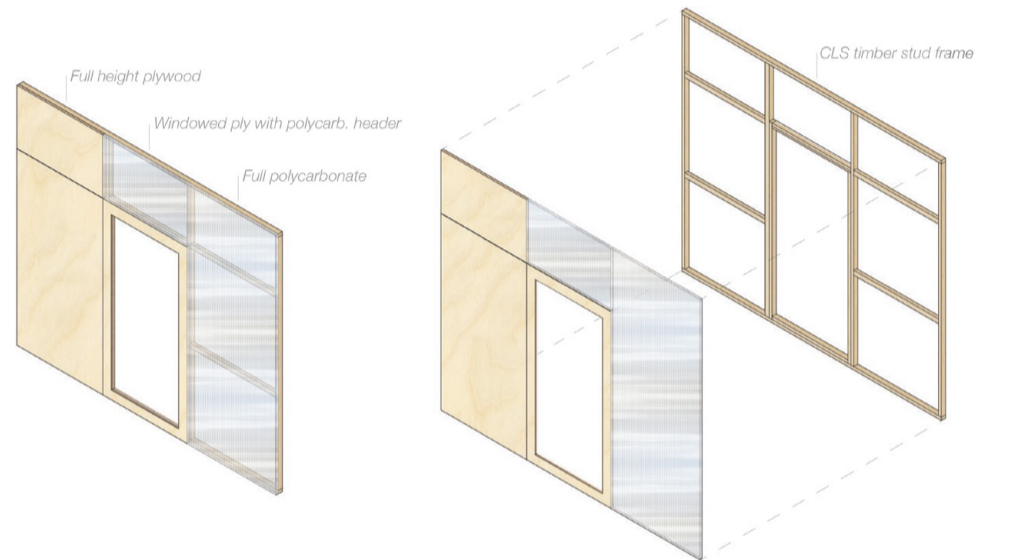
Vertical Hierarchy

Using the ‘3 Steps of Making’ to define the themes of each level, the next step was to establish circulation through the space. The site’s volume and the top-down narrative led to exploration of the site’s verticality and the creation of the void.

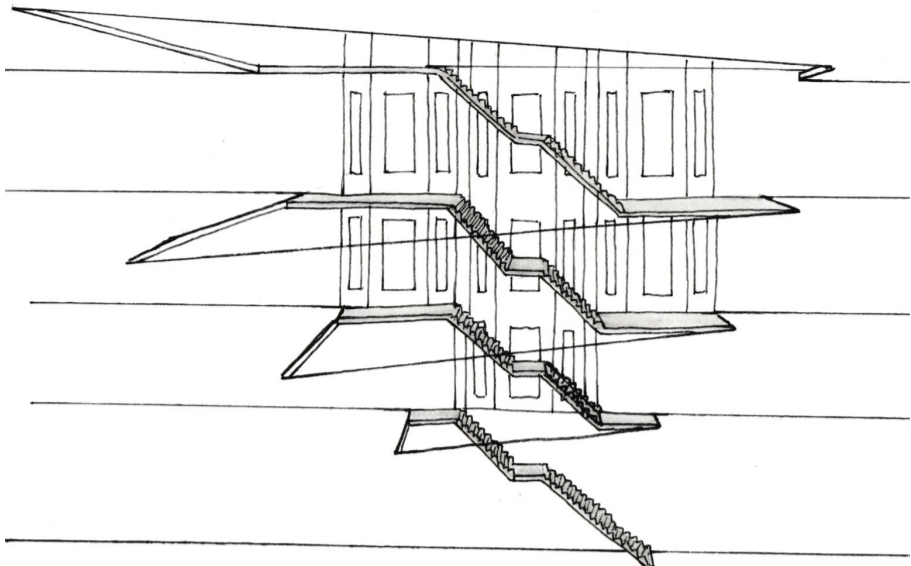
The natural response to the building’s abstract shape was to work in harmony with it, creating a void echoing the wedge shape of the exterior walls. Employing this shape to open up the space vertically created a drastic change in the relationship between levels whilst also harmonising with the geometry of the site. The wedge also provided the opportunity to square the various workspaces against the long facade, creating a cleaner spatial arrangement.

User circulation laps around the expanding void, taking them past adjacent workspaces on their journey, offering places for rest and socialising along the way.

The proposal is comprised of two angles: the bespoke and the universal. The bespoke refers to the interventions that are a specific response to the host space, such as the creation of the void and curved partitions, which react directly to the building’s existing forms. The universal alludes to interior elements that are adaptable to almost any given space. In keeping with the typology, all interior fixtures and furnishings make use of standard building materials and their sizes - intended to be fabricated on site with the equipment available in the workshops. This approach to materiality with the use of basic construction methods ensures accessibility in the realisation of the design proposal, or indeed the replication of the design in another space.



Partition System: Varying styles of partition using standard sheet materials on basic stud frames. These planes are strategically used throughout the interior, working to prioritise visibility in some areas, or fully conceal in others.



SECTION 01



Ground Floor.

The user journey begins with the *Made*. The ground floor serves as the public-facing element of the facility, providing a cafe kiosk, and a flexible retail and exhibition space for the selling and showcasing of user's works - a crucial aspect often missing from similar facilities.



Assembly Space.



Triangular Leg Frame

Square steel tube structures powder coated green serve as the workbench frames. Top and bottom surface materials are interchangeable to suit the different work-spaces.

Plywood mitre joint frames create a triangular leg used to support benches and desktops throughout the space. The 5° angle echoes the taper of the void.



Workbench

The Assembly Space bridges the wood and metal workshops, providing an open area with bespoke workbenches for use of hand and power tools.

Within the linear narrative of the '3 Steps' is a gravitational arrangement to the workshops. Spaces find their place in the vertical through the *weight* of their processes. The first floor houses the *heavier*, or more traditional activities of woodworking and metalworking.

The second floor hosts the digital fabrication facilities and ceramics workshop. Though they are physical disciplines, the fluidity of the materials and processes at hand creates a gradient between workspaces as the user travels further up the linear narrative, bridging the digital matter of the *Ideation* floor with the tangible artefacts being made on lower levels.





Electronics Workshop.



Individual 'nook' desks in computer lab.

The third floor hosts the *Ideation* phase of the narrative, providing a computer lab, electronics workshop (or *hackerspace*), resource library, and social space/kitchenette. The level provides spaces for the development and sharing of ideas, whilst also addressing the state of craft and making at present; embracing the adjacencies (and more increasingly intergration) between traditional physical crafts and digital based creation.



Resource Library.

The user journey reaches its end (or beginning) at the rooftop terrace, populated by a communal garden/*growerspace*. A polycarbonate roofed path creates a route around the perimeter of the roof level, leading the user to the VR/photogrammetry facilities hosted in the cupola.



Rooftop Garden // Growerspace.