

This project explores the design of an interactive play and learning environment for children and families who use Makaton, a language programme that combines speech with signs and symbols to support communication. Inspired by my cousin Max, who uses Makaton to communicate, the project aims to create a space that is inclusive, engaging, and supportive of a wide range of communication needs.

Rooted in research around non-verbal communication, neurodivergence, and inclusive design, the space is carefully zoned to support both structured learning and free play. It includes sensory areas, breakout spaces, and observation points for caregivers, creating a balanced environment that encourages independence while offering support.

The design concept centres on a hierarchy of learning through play, placing children at the heart of the experience. The idea of a "building within a building" reflects this creating a playful, child-scaled world inside a more grounded adult structure. This allows children to explore freely while adults remain nearby, offering guidance and encouragement as needed, and supporting communication, confidence, and connection through everyday interactions.

The inspiration behind this project is my little cousin Max. He has autism and, growing up, he struggled with his speech. One story that really stuck with me was hearing how, during a visit to a soft play centre, other children would run away from him and exclude him from playing simply because he couldn't communicate with them. It was an upsetting experience not just for Max, but for the other children too, who didn't understand how to include him. That moment shaped the heart of this project. The Signing Spot is designed to encourage communication between all children, both verbal and non-verbal, so that no one is left out. It aims to create a space where children like Max feel seen, heard, and included, and where play becomes a shared language for everyone.

# **Problem & Solution**

### **Problem**

There is a lack of dedicated spaces for Makaton users, especially children who are often excluded from typical play areas and social spaces. Opportunities to teach the importance of Makaton outside school settings are limited, and families often lack local support. Many families also struggle with childcare and other everyday needs due to the general lack of awareness and understanding of Makaton among caregivers and the wider community. With many resources available only online, access can be challenging. This highlights the need for a physical learning centre to support children and families while promoting inclusion and fostering a sense of community.

Create a Makaton-friendly space to support families and raise awareness about its importance. Provide an inclusive area where children can socialize, participate in society, and where children without disabilities can actively engage with those who have disabilities. Offer in-person classes beyond online resources, providing affordable, hands-on learning opportunities. These can include sensory experiences and environments to better understand how people with varying abilities use Makaton. Foster a supportive community where families can connect, share experiences, and feel reassured knowing others face similar challenges.

## **Solution**

## **Users & Stakeholders**

#### Users

Children and Families Who Use Makaton: A safe and supportive space designed specifically for their needs.

Families Interested in Learning Makaton: A welcoming environment for families who want to understand and engage with Makaton.

Teachers and Educators: A physical space to teach and practice Makaton beyond the limitations of online

Social Hub for Families and Users: A space for connection, support, and shared experiences.

shared experiences.
Everyone Seeking a Unique Experience:
Whether learning Makaton for the first
time or finding a sense of belonging,
the space is open to all.

Staff Members: Individuals employed to manage and run the facility, ensuring a safe, inclusive, and supportive

Makaton Users: People who actively use Makaton and benefit from the space, including children, families, and individuals with communication challenges.

Job Seekers with Disabilities: Individuals, such as those who are deaf or have other disabilities, who may face barriers in traditional workplaces but can bring valuable skills and lived experience to this setting.

Makaton Enthusiasts: People who know Makaton and want to showcase it as a skill, helping to raise awareness and support others in learning.

#### **Stakeholders**

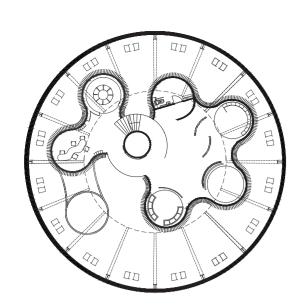


## **Site Location**

My Inspiration - Max

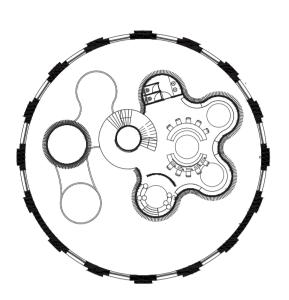
100 Govan Rd, Glasgow G51 1DZ
The South Rotunda is situated near several iconic
Landmarks in Glasgow's skyline, including the Scottish
Event Campus (SEC), The Hydro, the Finnieston Crane,
The Squinty Bridge, and the River Clyde. It is also
Adjacent to the STV and BBC offices. Located in the
city centre, it offers easy access to various transport
options, including trains, buses, taxis, the underground,
and plenty of parking spaces. This makes it convenient
for everyone, including those who may struggle with
communication, as they can choose the mode of
transport that feels most comfortable for them.





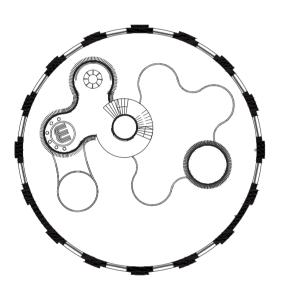
## **Third Floor**

3rd Floor – The Makaton Play Area A vibrant, interactive space where children can learn Makaton through play. Designed to be fun and engaging, this area encourages communication and confidence-building through movement, exploration, and creative activities.



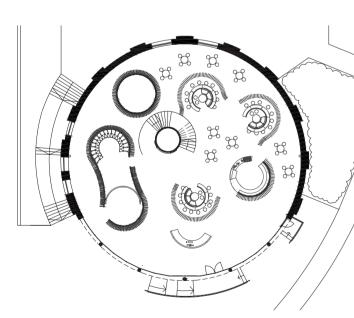
## **Second Floor**

2nd Floor – The Learning Loft A dedicated zone for adults and teens to learn Makaton in a relaxed, welcoming setting. The Learning Loft hosts in-person sessions and workshops, helping users build their signing skills at their own pace while connecting with others.



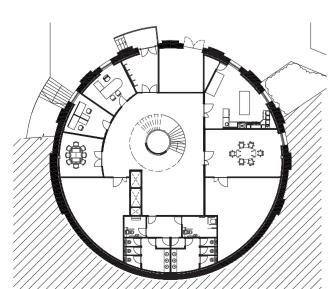
## **First Floor**

1st Floor – The Sensory Spot A calming retreat designed to soothe and support emotional well-being. The Sensory Spot offers soft lighting, tactile materials, and peaceful surroundings, making it an ideal place to pause, regulate, and recharge.



## **Ground Floor**

Ground Floor – Café & The Communication Pit
The welcoming heart of the building, where visitors first arrive. The café offers a cosy space for families to connect, relax, and share experiences. Nearby, The Communication Pit invites users of all ages to practise signs and speech in a playful, informal setting.



## **Lower Ground**

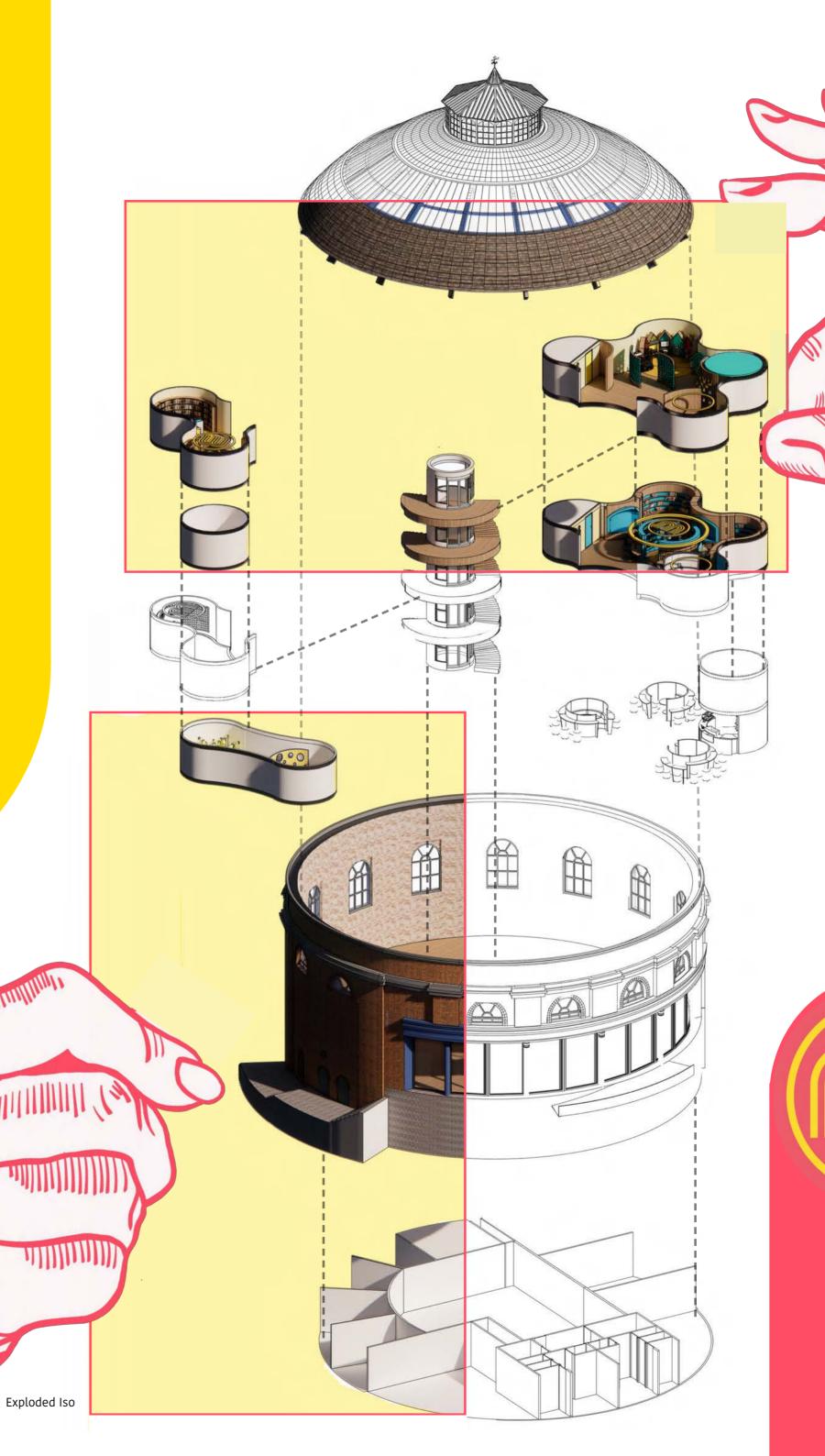
Lower Ground – Staff and Service Areas

This level supports the day-to-day operations of the space. It includes staff entrances, offices, toilets, kitchen facilities, and essential building services—everything needed to keep The Signing Spot running smoothly behind the scenes.





Model Photography





Learning Loft/Classroom

Section AA not to scale

Inside the Centre

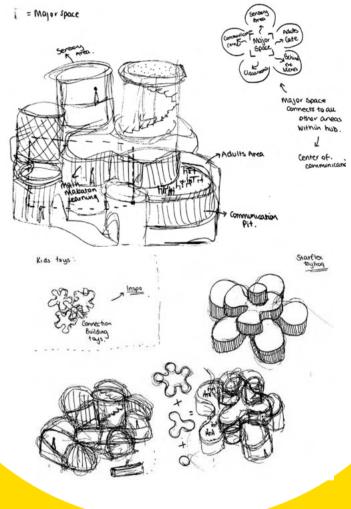


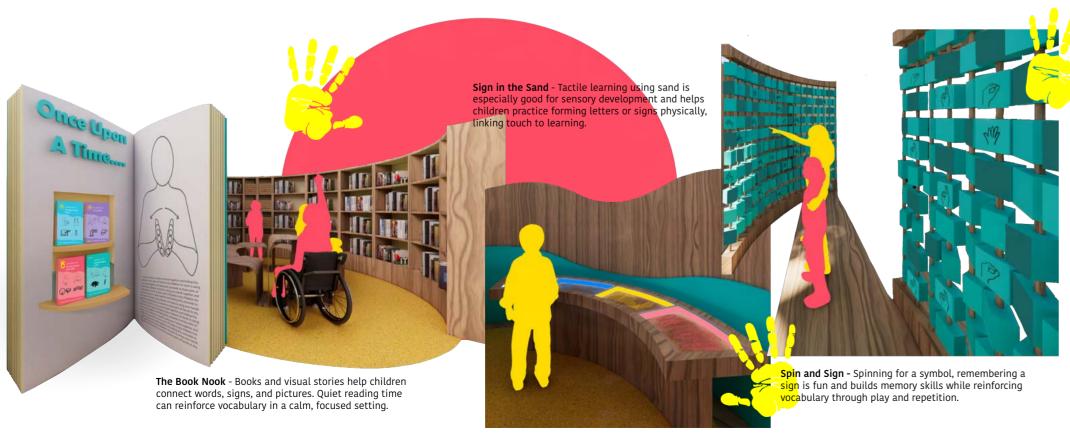
## **Makaton Play Area**

Learning through play is essential for children's development, especially when designing inclusive spaces where communication is central. Since many Makaton users are children, play becomes a natural and effective method for them to explore language, build relationships, and express themselves. The concept of play informed every part of the design process, placing it at the heart of the space to create an environment that feels engaging, welcoming, and easy to navigate for young users. Inspired by the shape and flexibility of Starflex toys, the design encourages movement, creativity, and interaction, reflecting the way children learn best through handson, joyful experiences. The result is a space that not only supports learning but celebrates it through playful exploration and meaningful connection.

Makaton Play Area









Mirror Me - Using mirrors helps kids watch themselves signing, which boosts confidence and accuracy. Copying an adult or peer in a mirror also supports recognition and recall.

Careers Corner - Shows children that they can grow up to be anything they dream to be. Visuals of inclusive workplaces help develop aspirations and a sense of belonging in society.

#### Learning Through Play

Learning through play offers a relaxed, low-pressure setting where children can explore and absorb new information naturally. By engaging in fun activities, they can develop problem-solving, language, and social skills without feeling overwhelmed, making learning both effective and enjoyable.

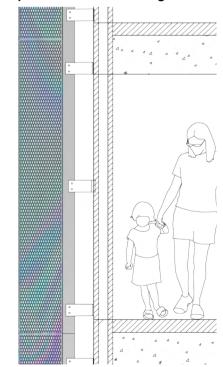


To make the cladding more private for the café area, both to help with soundproofing and to allow signed conversations to feel more personal I looked into weaving techniques using materials that don't typically go together. I began by exploring different patterns and approaches, which eventually led to using expanded metal mesh: a strong architectural material that shifts visually depending on the viewer's angle. Through this rigid mesh, I wove softer, more delicate materials such as string, iridescent film, and fibre optic lights, creating a layered effect that reflects the complexity and beauty of non-verbal communication.



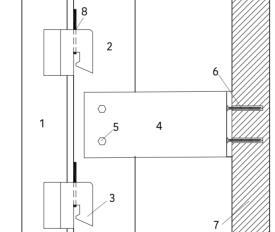


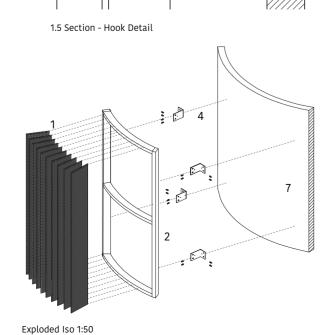
#### **Superstructure Mounting**



#### Superstructure Section

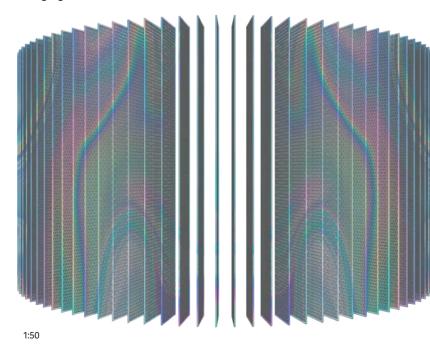
- 1 50.8mm x 50.8mm x 10 gauge expanded metal mesh fixed to frame with continuous weld along perimeter.
- 2 Skeleton frame constructed from 50mm x 50mm x 3mm galvanized steel square tubes. 3 - Hook bracket: 40 x50x20mm, 3mm thick stainless steel, welded to frame at predetermined
- 4 100mm x 225mm x 8mm L Bracket.
- 5 8mm machine screws for brackets.
- 6 5mm woodscrew with resin anchor for fixing to timber structure or substrate.
- 7 12mm laminated plywood, for structural walls. 8 - 25mm x 5mm horizontal slots in facade support frame to receive 3mm thick stainless steel hook brackets, aligned with bracket positions.





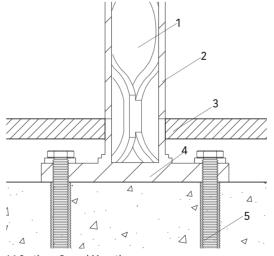
#### Revealing the Hidden Voice

Expanded metal mesh changes depending on how you look at it, symbolising the importance of seeing things from different perspectives. To deepen this idea, the iridescent coating reflects how spoken conversations can fade or go unheard. But when we communicate with hands and symbols, like in Makaton, the unseen parts of communication are brought to light, just like how is ideased to be a second of the part of th iridescent materials reveal colours from the spectrum we don't usually see,

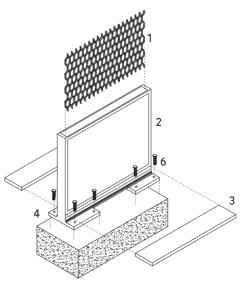


# 1:20

#### **Ground Mounting**

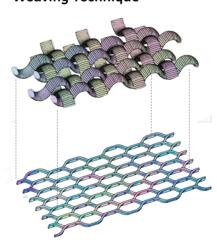


1:1 Section - Ground Mounting



Exploded Iso 1:10

#### Weaving Technique



1:4 Exploded Iso

#### Finding Connection Through Contrast

Weaving mesh and felt together brings two very different materials into conversation, one is hard and structured, the other delicate and flexible. Though they don't naturally go together, through weaving, they find a way to connect. This process reflects how verbal and non-verbal communication may seem incompatible, but through Makaton as a shared language, they can communicate and understand each other.

#### Key:

- 1 Expanded metal mesh, 50.8mm x 50.8mm x
- 10 gauge.2 Mesh welded to stainless steel frame with
- continuous perimeter weld.
  3 Finished floor level.
  4 Welded base plate, 10mm thick stainless
- steel, fixed to frame base. 5 - 8mm anchor bolts secured to ground through base plate.



The final cladding material became felt, capturing the original concept of contrasting textures in a more refined way. It provided both soundproofing and privacy, making it ideal for the café area where signed conversations happen, while still reflecting the softness and sensitivity of non-verbal communication.