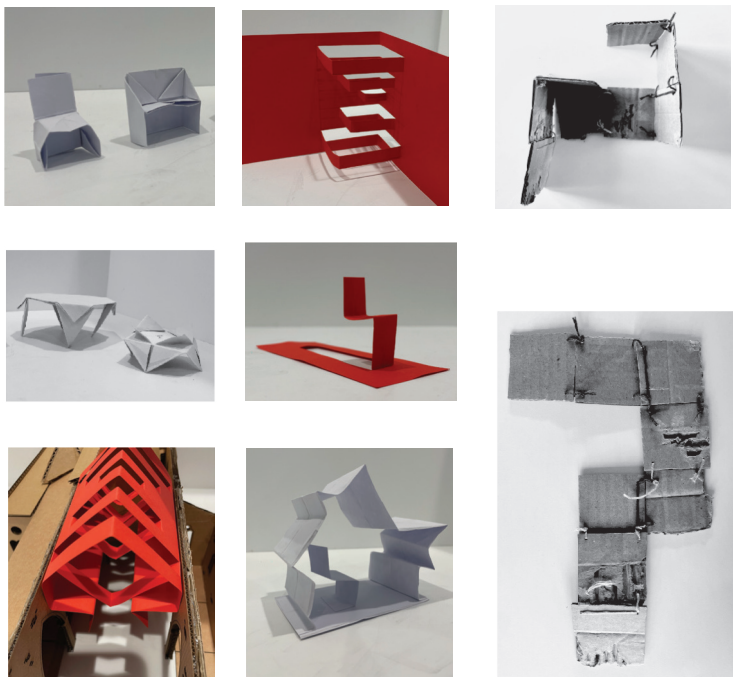


FOLDED REALMS

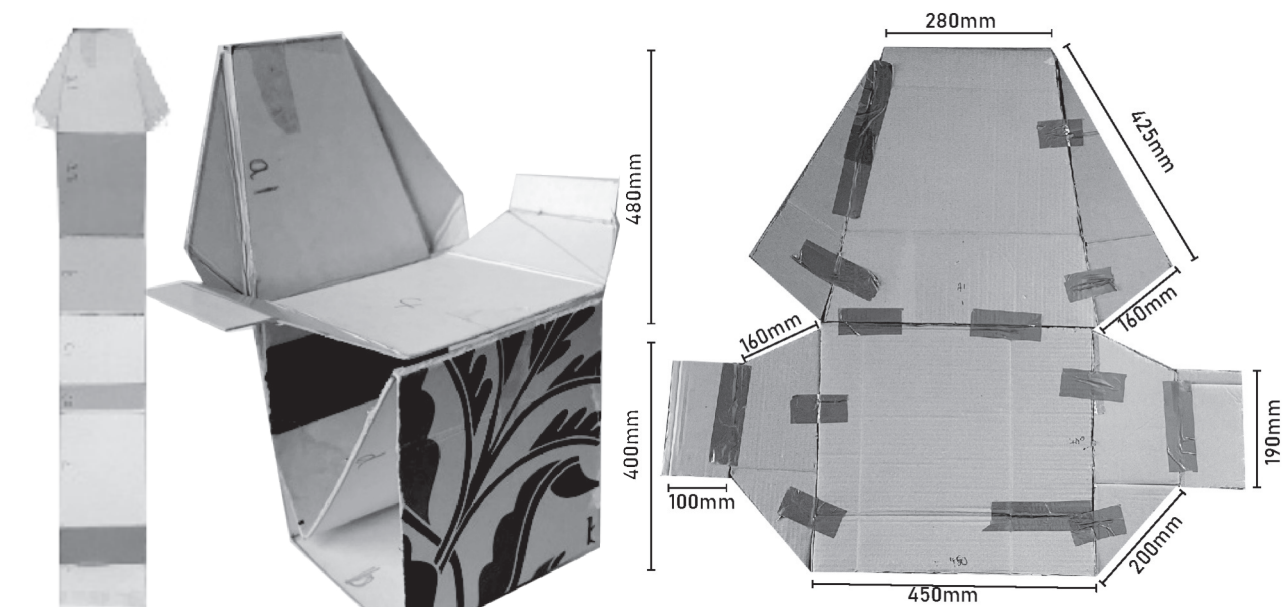
CONCEPT DEVELOPMENT



Observing contemporary dining in churches, I found the visual juxtaposition of traditional and modern quite interesting.

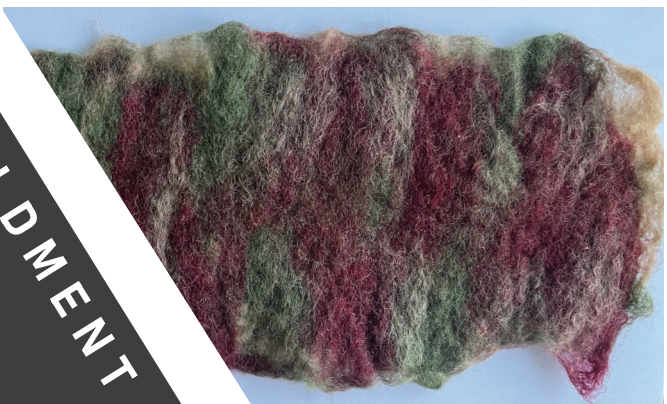


Experimental folded forms, looking at ways furniture can fold into its environment and how flat nets fold into form.

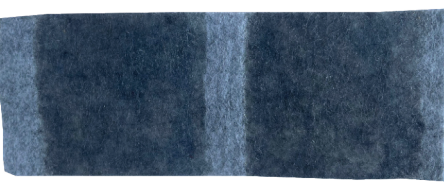
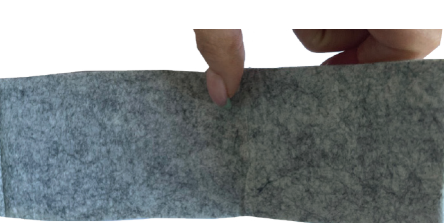
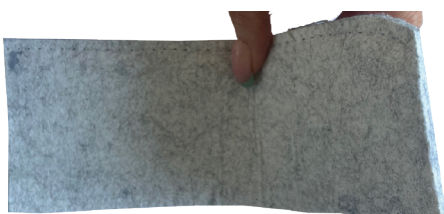


Developed prototype cardboard chair at 1:10 and 1:1 to determine necessary angles needed to bend. I decided here to incorporate fabric as it can be moulded into various shapes.

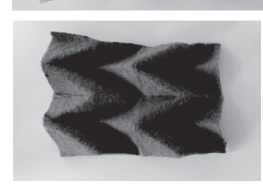
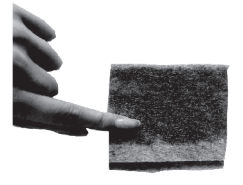
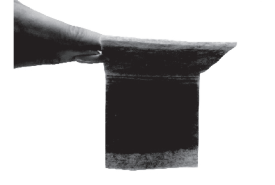
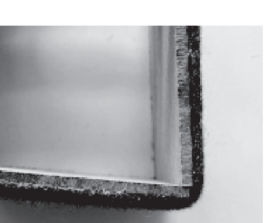
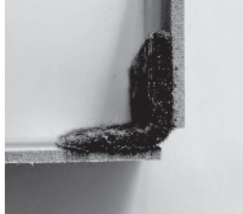
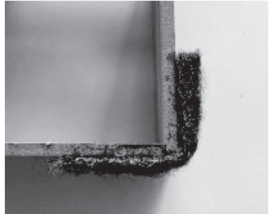
MATERIAL EXPERIMENTATION



Making felt by aggravating the fibres with hot soapy water and rubbing over a textured surface, causing the wool to felt.



Experimenting with starch (top) egg white (middle) and resin (bottom) to test their strengthening ability when applied to 3mm felt. Resin was the most successful when I left a gap untreated, it allowed full movement (bottom right.) I then moved on to using felt as a junction between wood and tested its strength, bending it both ways to test the allowance gap required to bend 90 degrees.

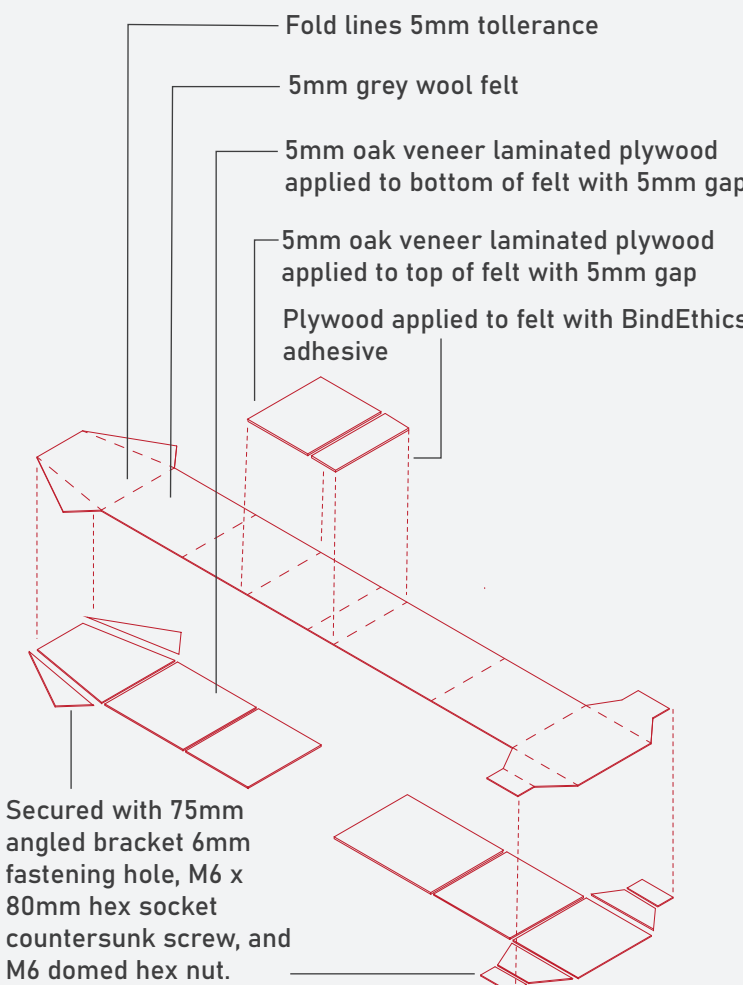
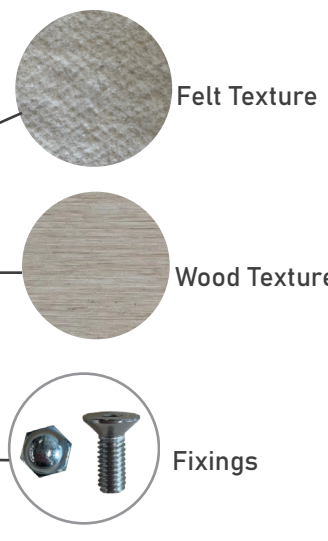
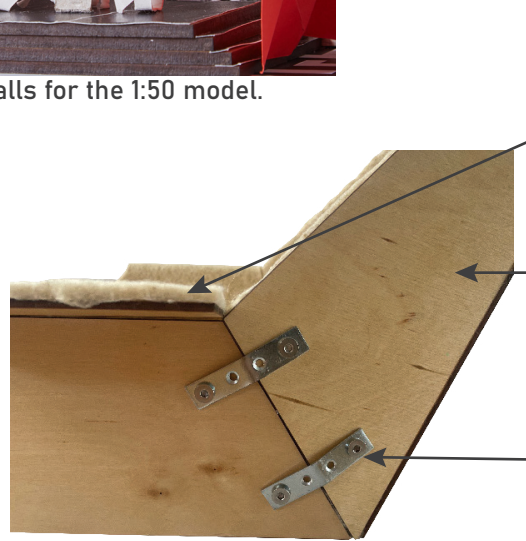


Application of felt to folding wall element shown in 1:20 model. Using paper as a structural base before applying felt and creating a pully system, allowing the felt to fold in on itself.

MATERIALITY THROUGH MAKING

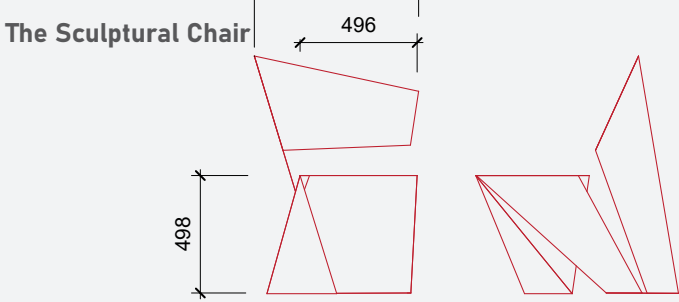
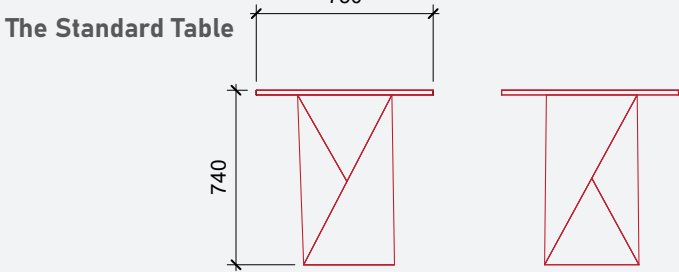
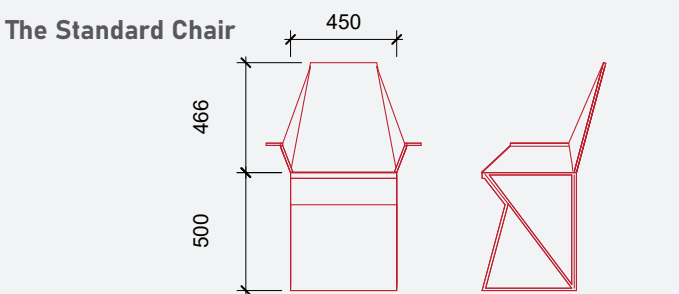


Applying materials to the interior of the dining area and making origami furniture and walls for the 1:50 model. I finalised the design of my chair using felt and plywood to construct it at 1:1.



From Flat to Function: The Standard Chair

I developed a series of furniture looking specifically at one chair exploring how it folds from flat form to functional. Through detailed material exploration, the work contrasts precise detailing with the poetic motion of transformation.



Precision and Presence
A word experiment juxtaposing technical and poetic construction language.

Folded in thought, like paper made solid, the chair takes form,

Fold lines 5mm tolerance
Grey felt lining, softens the welcome,
5mm grey wool felt
While plywood, encased in vinyl's warm sheen,
5mm oak veneer laminated plywood
Held fast by angled brackets, each screw a promise of rigidity,
M6 x 80mm hex socket countersunk screw
Brings strength drawn from grain, firm beneath shifting weight.

Measured with intention,
3400mm length net stored flat
It slips beneath the table, awaiting its guest,
500mm height
Cradling the diner in a structured embrace.

A support beneath laughter, clinking glasses, and shared plates.

The Standard Chair
Where form folds into function,
A device to sit and eat.

This project involved the adaptive reuse of the Royal Garrison Church, which I reimagined and transformed into a restaurant, blending historical tradition with contemporary dining. The dialogue between furniture and space reflects a tension between tradition and innovation. The folding forms draw directly from the ancient art of origami, a practice rooted in ritual, discipline, and cultural heritage. Yet it also lends itself to contemporary reinterpretation through material experimentation and innovative construction.

My main chosen material is felt. Natural felt is a textile material made out of sheep wool. It is one of the oldest forms of non-woven fabric. The material is fabricated by matting, condensing, and pressing the wool together. Wool felt has amazing qualities making it a suitable choice for its use within a restaurant, including: natural, acoustic, biodegradable, thermal and hygrometric regulation, odour reduction, high combustion temperature, and water resistance properties.

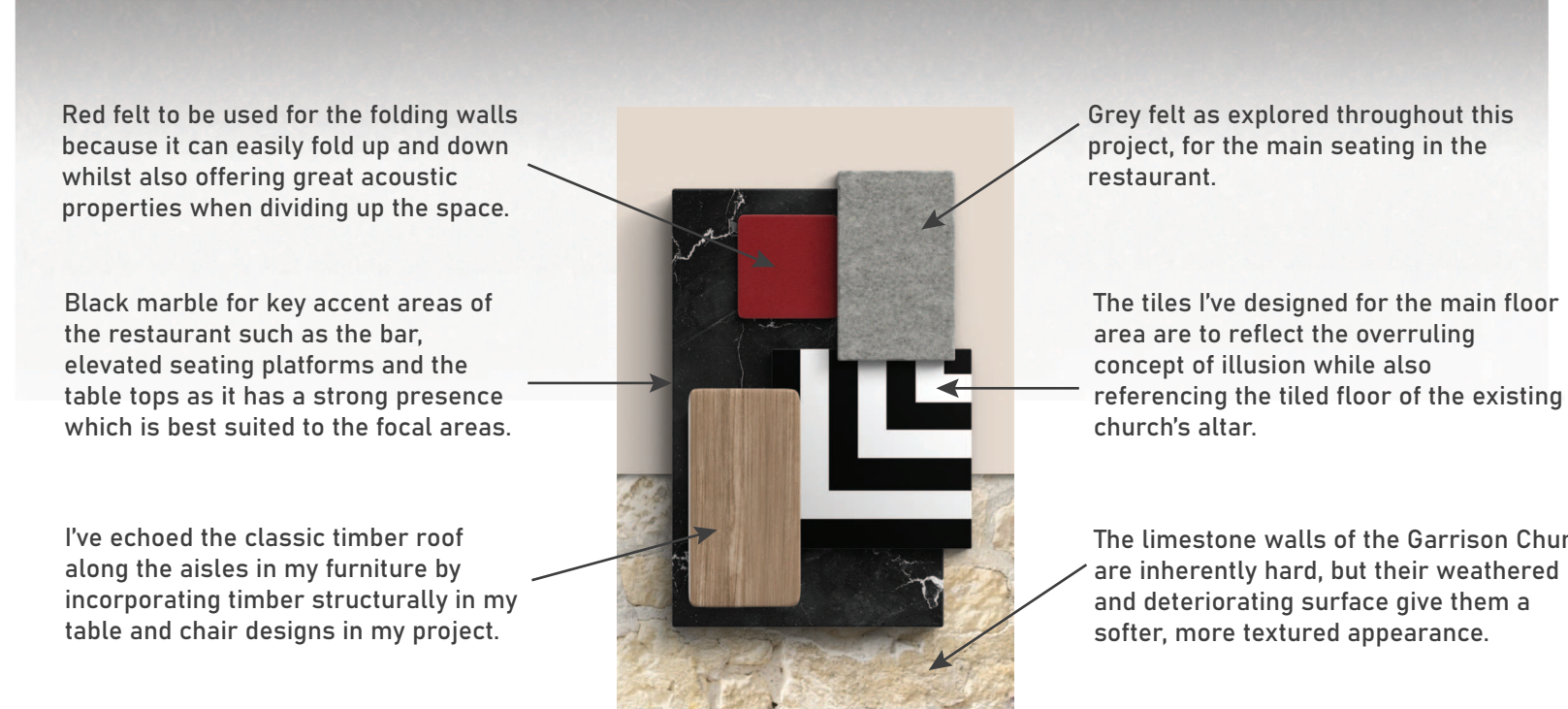
Felt making can be achieved through a number of processes. Including dry felting, which involves weaving the individual strands using barbed needles. Wet felting, the process of using a combination of heat, friction, and agitation to matt the fibres. Also pressed felt, which is commonly made industrially in the same way with heat and water but is compressed into different thicknesses.

Making felt becomes ritualistic through its repetition, community bonding, and its symbolic transformation of a raw material into meaningful objects. Felt making is labour intensive and often done in groups, with rhythmic, repeated actions such as rolling, rubbing, and pressing. These repeated gestures can take on a meditative, almost ceremonial quality, much like origami.

My 1:50 model of a section of the church restaurant expresses the materiality and folded forms across a range of scales. Each piece was individually folded and assembled to embody origami, not only in form, but in process. This hands-on approach was a continuation of my exploration into ritual allowing me to engage in the repetitive acts of making, fostering a deeper connection to my concept.

HOW DO RITUALS INFORM THE ENFOLDMENT OF TRADITION AND INNOVATION?

This investigation operates across a range of scales, from furniture to roof, applying the same geometric principles, I aimed to create a cohesive spatial language that unifies structure and object, enclosure and interaction. In this way, the furniture becomes more than functional, it becomes performative, adapting to shifting uses and inviting new rituals to emerge within the folded realms. My interest in folded forms began with an exploration of rituals I observed in both churches and restaurants. The order of service, sharing of food, and intentional use of music contribute to a sense of meaningful, shared experiences through structure and repetition. This led me to explore origami as a medium as its deliberate, structured folding process aligned with the ritualistic qualities I had witnessed. By applying origami principles across a range of scales, I sought to create objects that not only express contemporary design methods but also embody the quiet discipline and thoughtful practice of making.



Red felt to be used for the folding walls because it can easily fold up and down whilst also offering great acoustic properties when dividing up the space.

Black marble for key accent areas of the restaurant such as the bar, elevated seating platforms and the table tops as it has a strong presence which is best suited to the focal areas.

I've echoed the classic timber roof along the aisles in my furniture by incorporating timber structurally in my table and chair designs in my project.

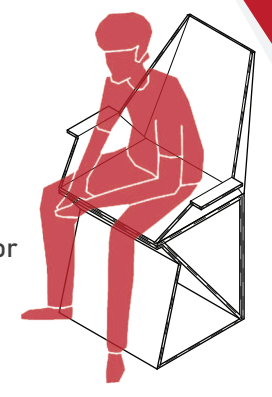
Grey felt as explored throughout this project, for the main seating in the restaurant.

The tiles I've designed for the main floor area are to reflect the overruling concept of illusion while also referencing the tiled floor of the existing church's altar.

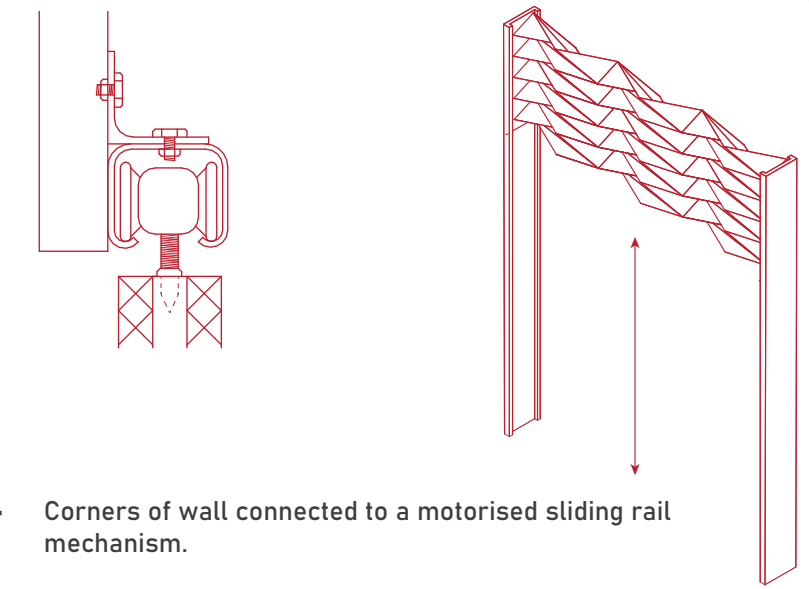
The limestone walls of the Garrison Church are inherently hard, but their weathered and deteriorating surface give them a softer, more textured appearance.

THE CHAIR

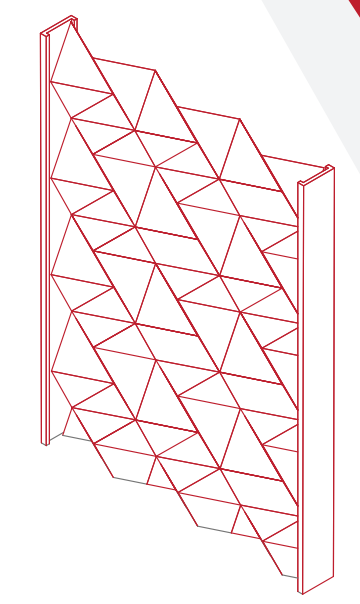
- Can be stored flat and assembled easily.
- Made with felt a strong durable, cushioning material acting as the junction, and plywood for strength and stability.



FOLDING WALL

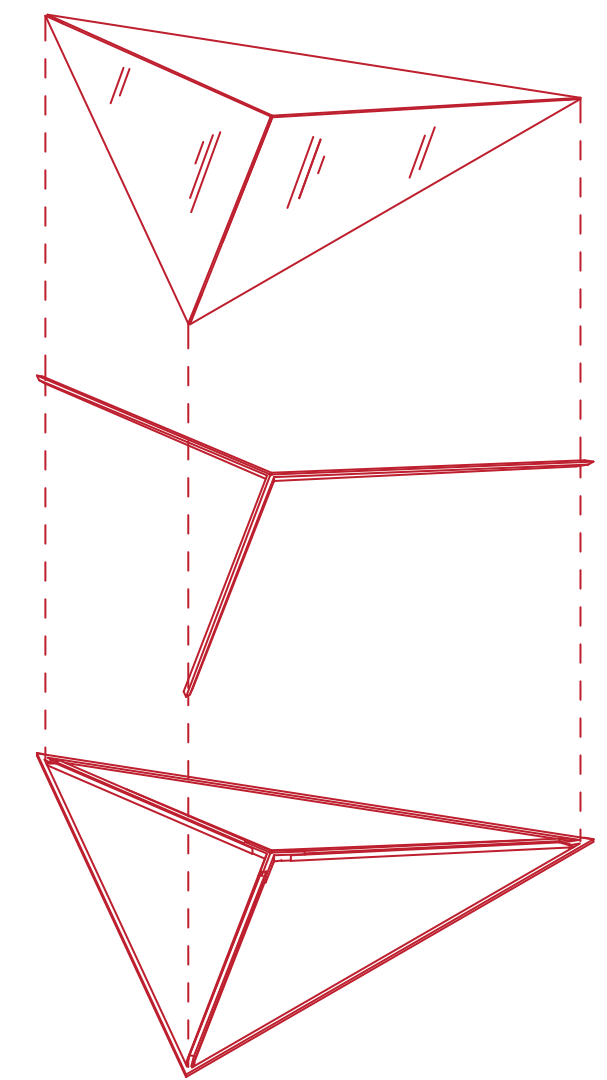


- Corners of wall connected to a motorised sliding rail mechanism.
- Open position allows for space utilisation.
- Closed position acts as an acoustic barrier enabling more privacy.



THE ROOF

- Comprised of two toughened glass panels with one solid led panel, to look like stars from underneath, blurring the lines between illusion and reality.
- Aluminium box section tetrahedron framework, mirroring the triangular folded language below.
- Gives the appearance of unfolded paper form afar.



I chose red as the primary colour of this project for its rich symbolic connotations, in the context of the church, red holds significant representations of passion, sacrifice and reverence. While in a restaurant setting, it stimulates appetite and energy, while also encouraging connection. Additionally, red is used in performative spaces, enhancing the theatrical and dynamic spaces in this project, in line with the rest of the church which unfolds into an illusory journey with shifting perspectives and spatial ambiguity.

