

Kuddfortet

- En Hemtrevlig Teater



Uppgiften

Programmet för projektet baserades på den årliga designtävlingen för studenter som anordnas av ASA (The Acoustical Society of America). Årets tävling kretsade kring att utforma en teatersal med plats för cirka 700 personer. Tävligen kom med ett antal förutbestämda krav för att utmana designprocessen och en fiktiv plats med bestämda mått. Uppgiften hade stort fokus på akustik och hantering av både externa och interna ljudkällor. Arbetet genomfördes tillsammans med en masterstudent från Sound and Vibration.

Concept

Imagine the feeling of ducking under a kitchen table draped in blankets, finding yourself in a world built for daydreams. At the heart of the theatre lies a cozy sanctuary, a reimagined pillow fort where the audience is invited to rediscover the excitements of childhood. Soft materials, cheerful colors and dimmed lighting creates an atmosphere that feels informal, a place where you're always dressed just right.

The roof of the building is an open, walkable park, a natural extension of the city's public space where the grass resembles a green blanket thrown over the building. Stepping beneath it and into the lobby, your eyes are drawn directly into the performance hall. The space opens wide but stays low, revealing the intimate distance from entrance to stage and offering an immediate connection between visitor and performance.

Shoes are left at the door, coats hung along the walls, details that quietly blur the line between home and theatre, while also softening the acoustics of the room.

Inside the hall, the pillow fort unfolds. Reused sails billow from the ceiling like a blanket thrown over a kitchen table and seating consists of loose, welcoming cushions. The design invites both comfort and curiosity, creating a space where playfulness and belonging meet.

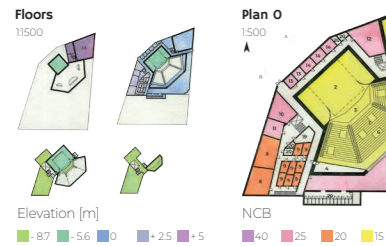
Competition posters

THE PILLOW FORT

Floor plans

The floor plan is carefully composed to ensure smooth flow between spaces while shielding key rooms from noise. Slanted walls prevent flutter echoes in all rehearsal spaces, securing acoustic comfort. The loading dock and scene shop are placed underground both to

simplify logistics to the stage and to keep noisy functions out of sight. Inside, a symmetrical lobby and performance hall contrast the building's playful, irregular exterior.



- 1 Audience Seating
- 2 Stage
- 3 Orchestra Pit
- 4 Lighting and Stage Manager
- 5 Follow Spot Booth
- 6 In-House Audio Mix Position
- 7 Rehearsal Room
- 8 Chorus Dressing Rooms
- 9 Solo Dressing Rooms
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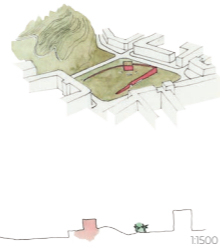
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Context

Centrally located in Gothenburg, the theatre rests on the edge of a historic district where colorful wooden houses shape the surroundings. Inspired by this context timber became a natural choice. Nearby buildings rise no higher than 3-5 stories and the design carefully follows this scale. The entrance meets the busiest street of the site, welcoming visitors straight from the urban flow. Behind, Skansen Kronan crowns the hill and the theatre's silhouette subtly

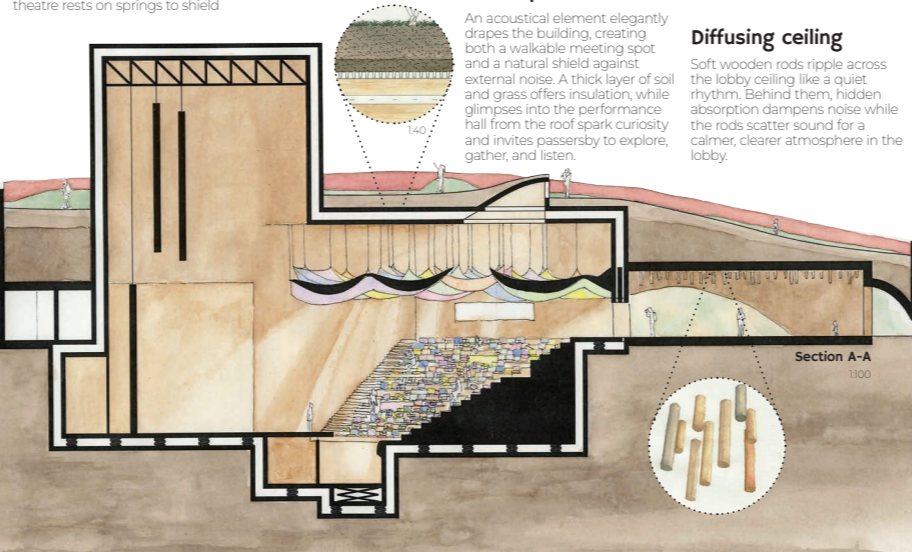
mirrors this famous monument in Gothenburg. Its deep *façade* red exterior ties the building to Swedish tradition while offering a warm contrast to the lush greenery draped across the roof.



Section

The theatre is partly embedded into the ground, allowing the landscaped roof to form a gentle, walkable slope that blends naturally with its surroundings. Visitors enter at the upper level of the seating, following an intuitive path down toward the stage, a layout that enhances both flow and everyday simplicity. The theatre rests on springs to shield

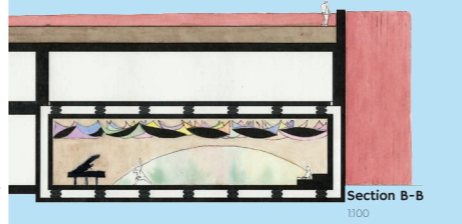
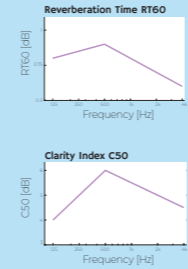
against vibrations while the scene house is carefully damped to avoid echoes. An adjustable curtain in the orchestra pit adapts the room's acoustics and a curved front edge ensures clear sound also reaches the stage.



Rehearsal room

The rehearsal room mirrors the atmosphere of the performance hall, with colorful sails draped overhead and a few seating steps inviting both rest and small audiences. Here the sails are absorbing, ensuring higher clarity so musicians can detect even the smallest mistakes while maintaining a similar reverberation time for consistency. If needed, additional absorption can easily be added above the sails.

The rehearsal room is enclosed by double walls with an air gap for maximum sound isolation while MEPFIT rooms rest on floating floors tuned to 3-4 Hz.



Landscape roof

An acoustical element elegantly drapes the building, creating both a walkable meeting spot and a natural shield against external noise. A thick layer of soil and grass offers insulation, while glimpses into the performance hall from the roof spark curiosity and invites passersby to explore, gather, and listen.

Diffusing ceiling

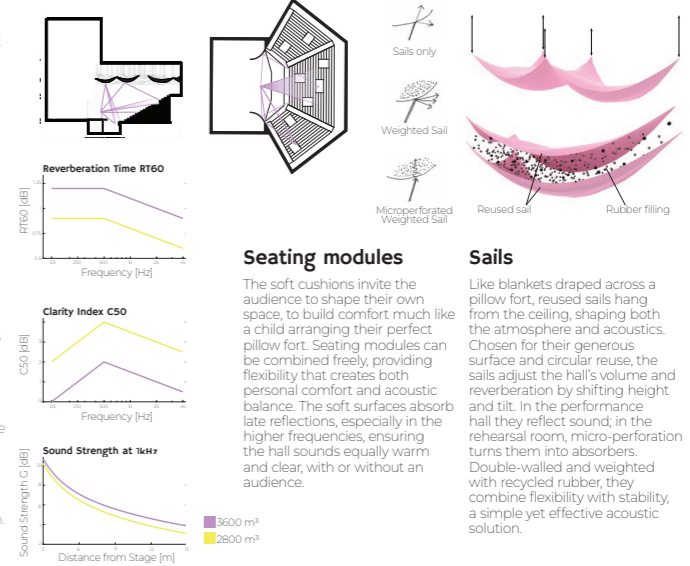
Soft wooden rods ripple across the lobby ceiling like a quiet rhythm. Behind them, hidden absorption dampens noise while the rods scatter sound for a calmer, clearer atmosphere in the lobby.

The performance hall

The performance hall is the heart of the theatre, a cozy and safe pillow fort, where soft materials, bright colors and dimmed lighting create the feeling of crawling under a blanket into a secret world.

Amphitheater-style seating supports the informal feel which allows most sound to reach the audience directly and ensures early reflections, within 20 ms for clarity and intimacy. The hall's total volume is around 3000 m³ and by adjusting the height of the sail ceiling elements, the volume can vary by up to 30%.

Instead of fixed chairs, a wooden staircase covered in soft cushions creates a compact layout that invites a shared experience. Blankets and beanbags are scattered throughout, allowing each visitor to find their own way of watching the performance. The staircase itself features irregularly placed cutouts, forming small, private pockets where families or groups of friends can gather and maybe even build their own pillow fort to enjoy the show from.

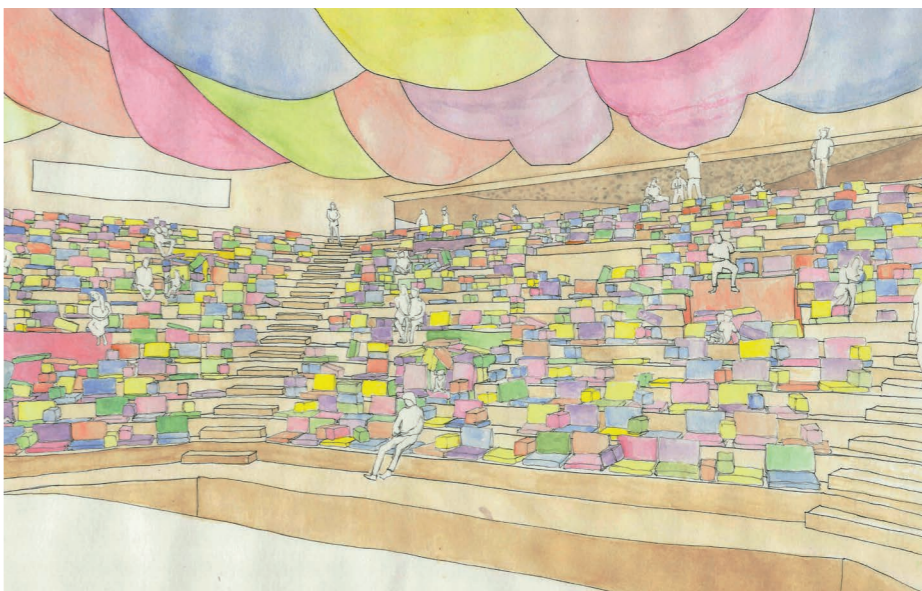


Seating modules

The soft cushions invite the audience to shape their own space, to build comfort much like a child arranging their perfect pillow fort. Seating modules can be combined freely, providing flexibility that creates both personal comfort and acoustic balance. The soft surfaces absorb late reflections, especially in the higher frequencies, ensuring the hall sounds equally warm and clear, with or without an audience.

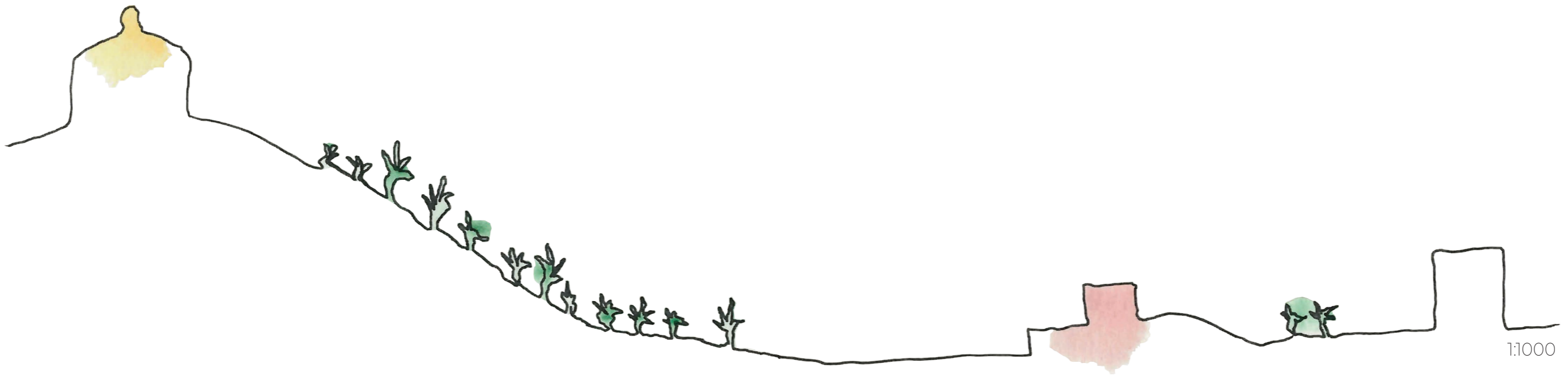
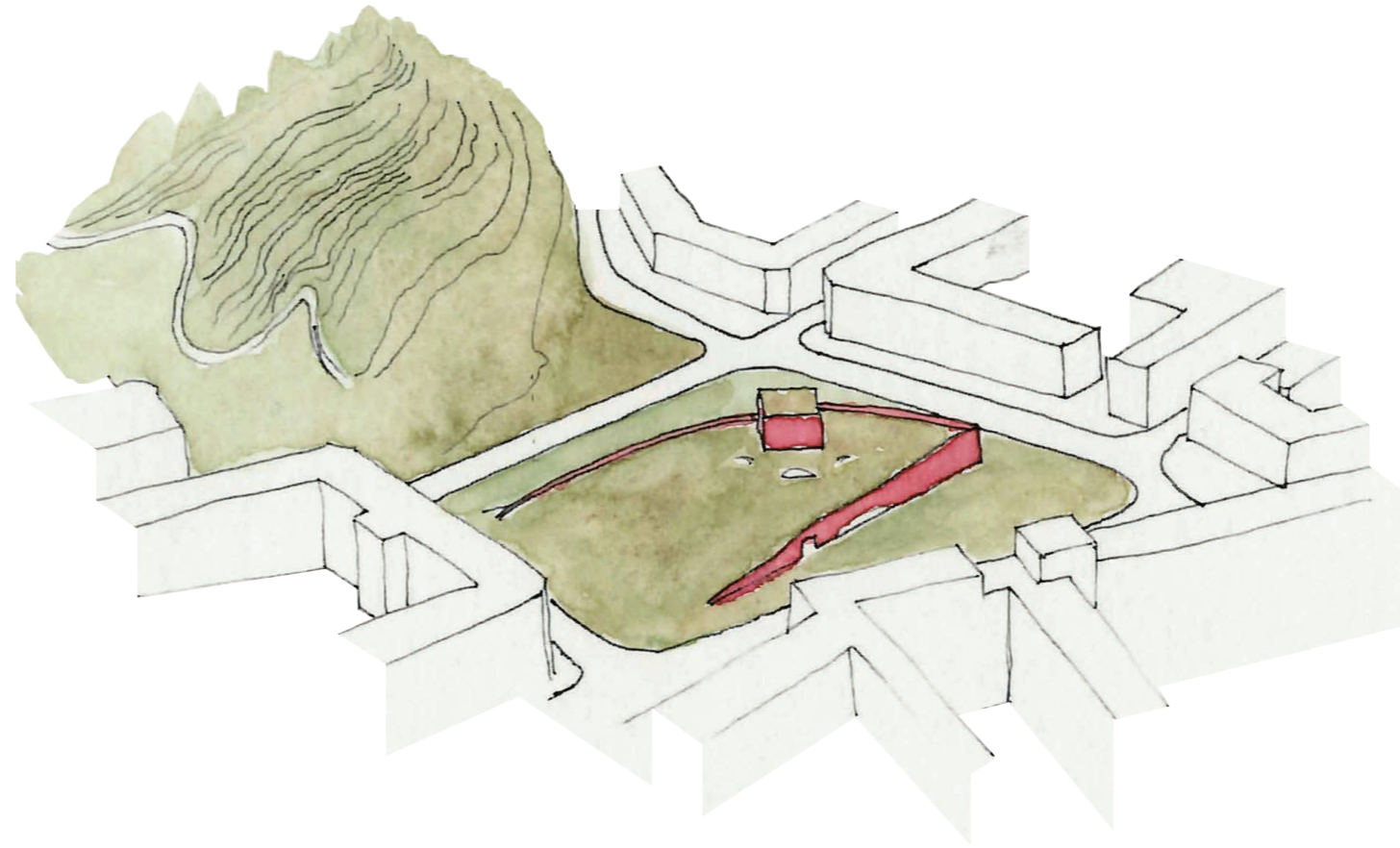
Sails

Like blankets draped across a pillow fort, reused sails hang from the ceiling, shaping both the atmosphere and acoustics. Chosen for their generous surface and circular reuse, the sails adjust the hall's volume and reverberation by shifting height and tilt. In the performance hall they reflect sound; in the rehearsal room, micro-perforation turns them into absorbers. Double-walled and weighted with recycled rubber, they combine flexibility with stability, a simple yet effective acoustic solution.



Context

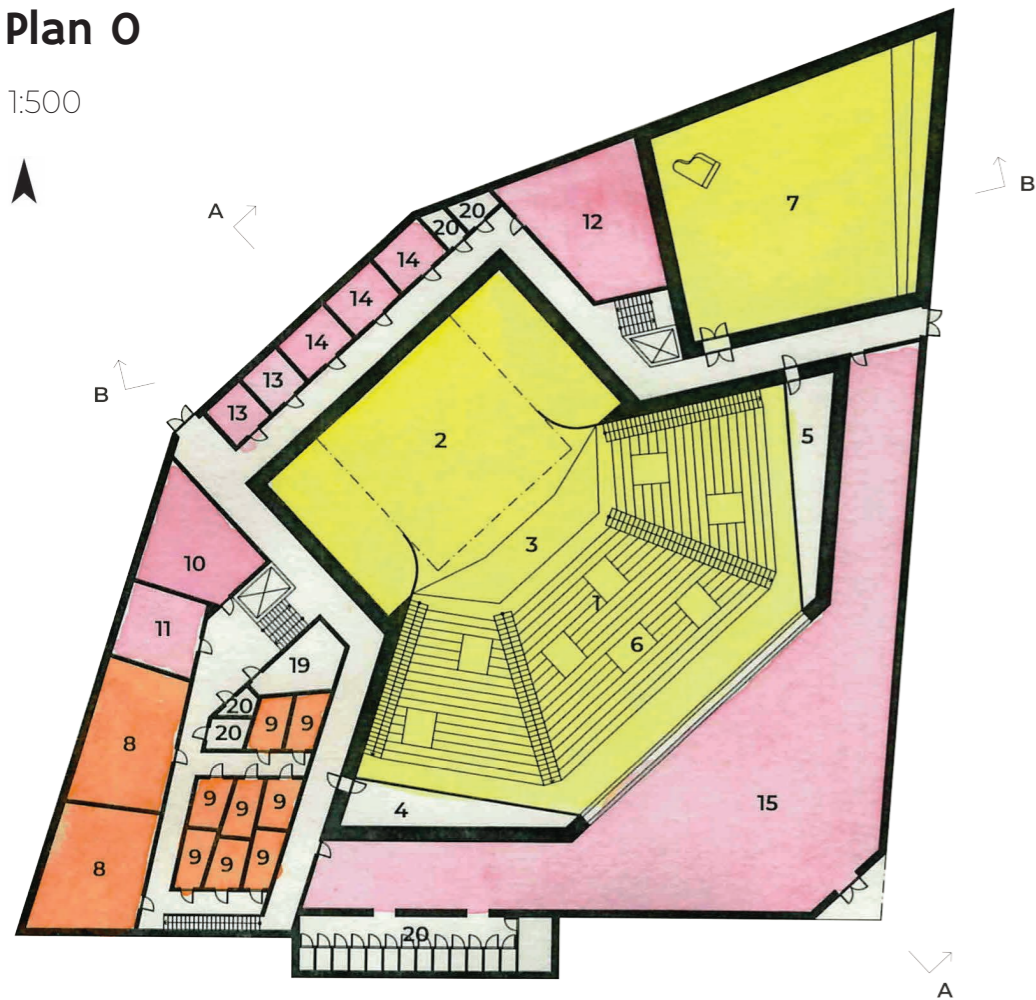
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1:1000

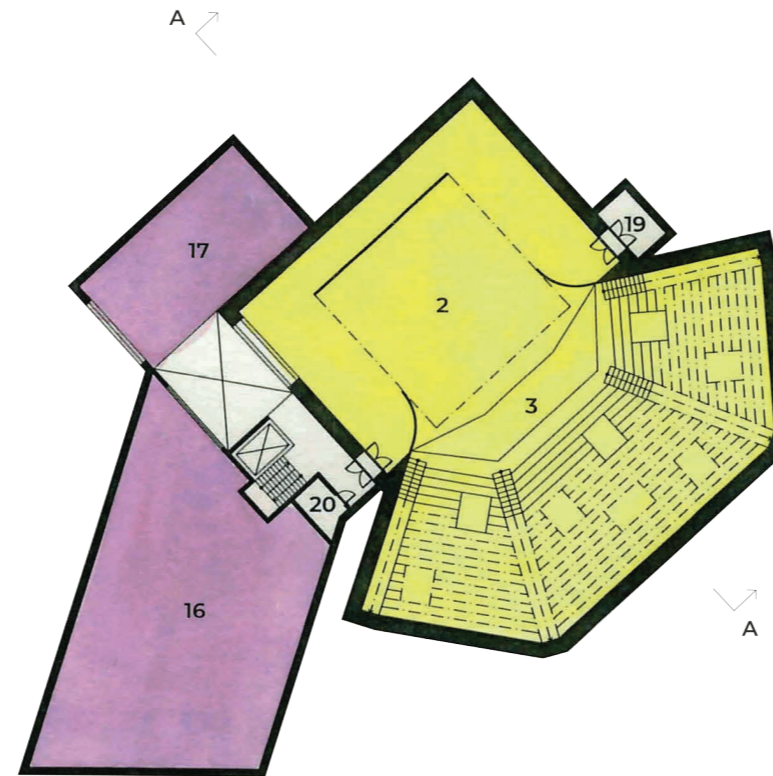
Plan 0

1:500



Plan -1

1:500



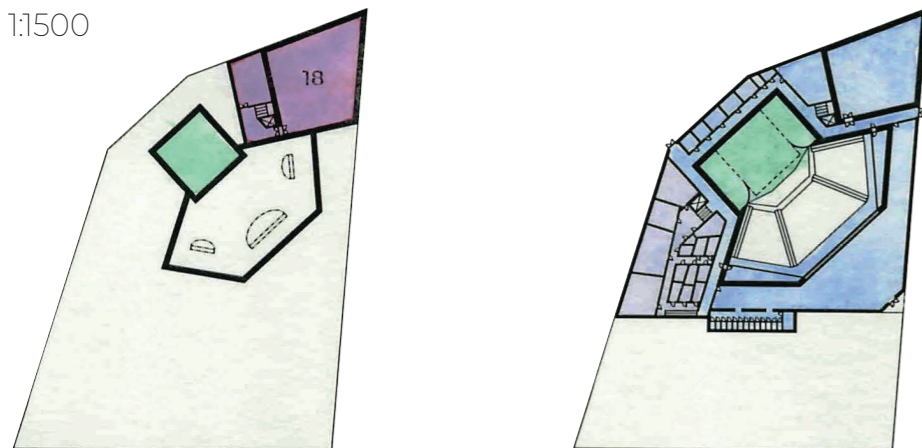
NCB



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Floors

1:1500



Höjd [m]



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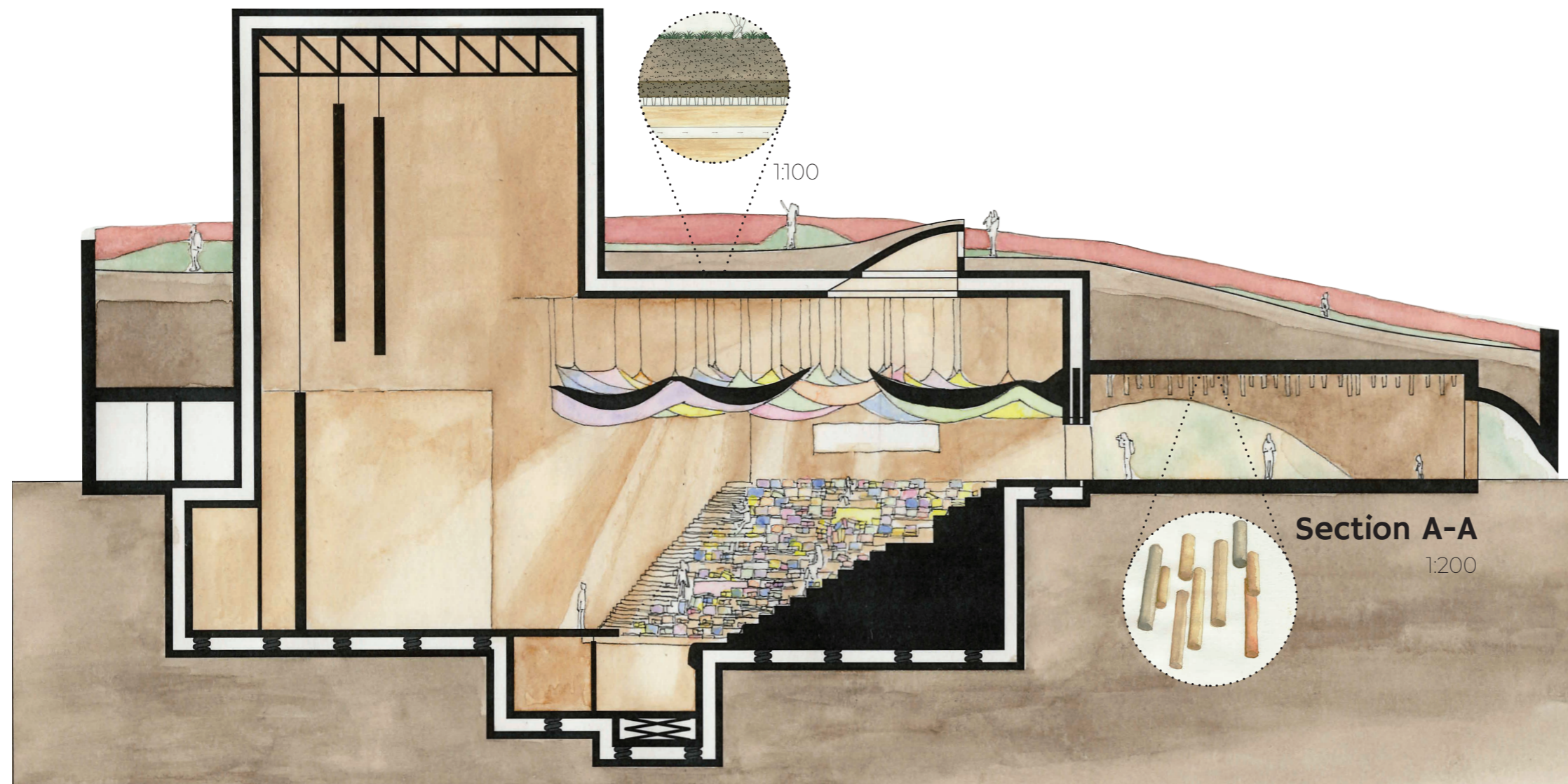
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Section B-B

1:200



Section A-A

1:200

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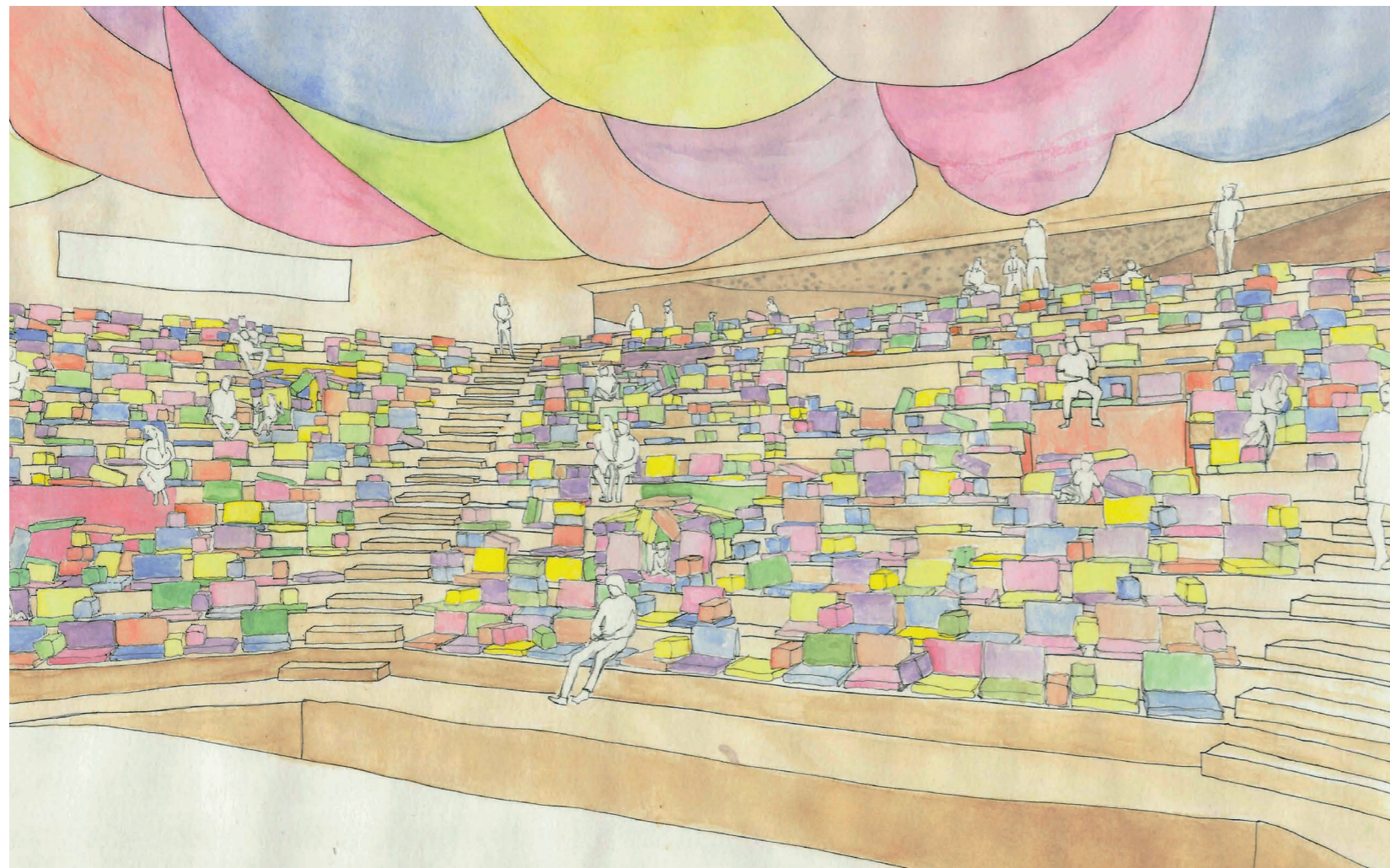
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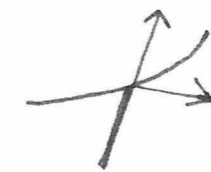


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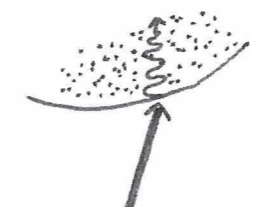
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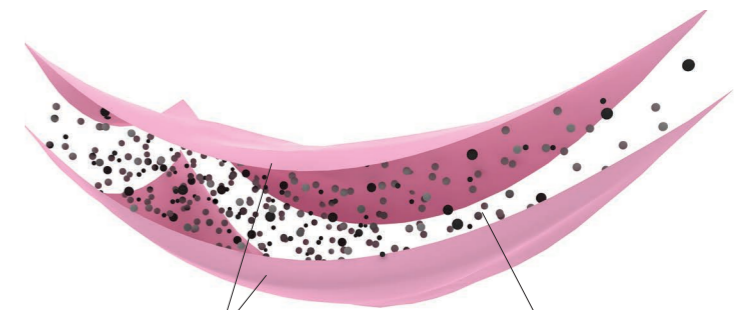
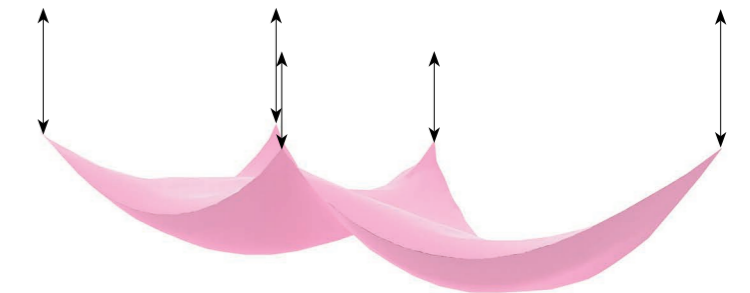
Sails only



Weighted Sail



Microperforated Weighted Sail



Reused sail

Rubber filling

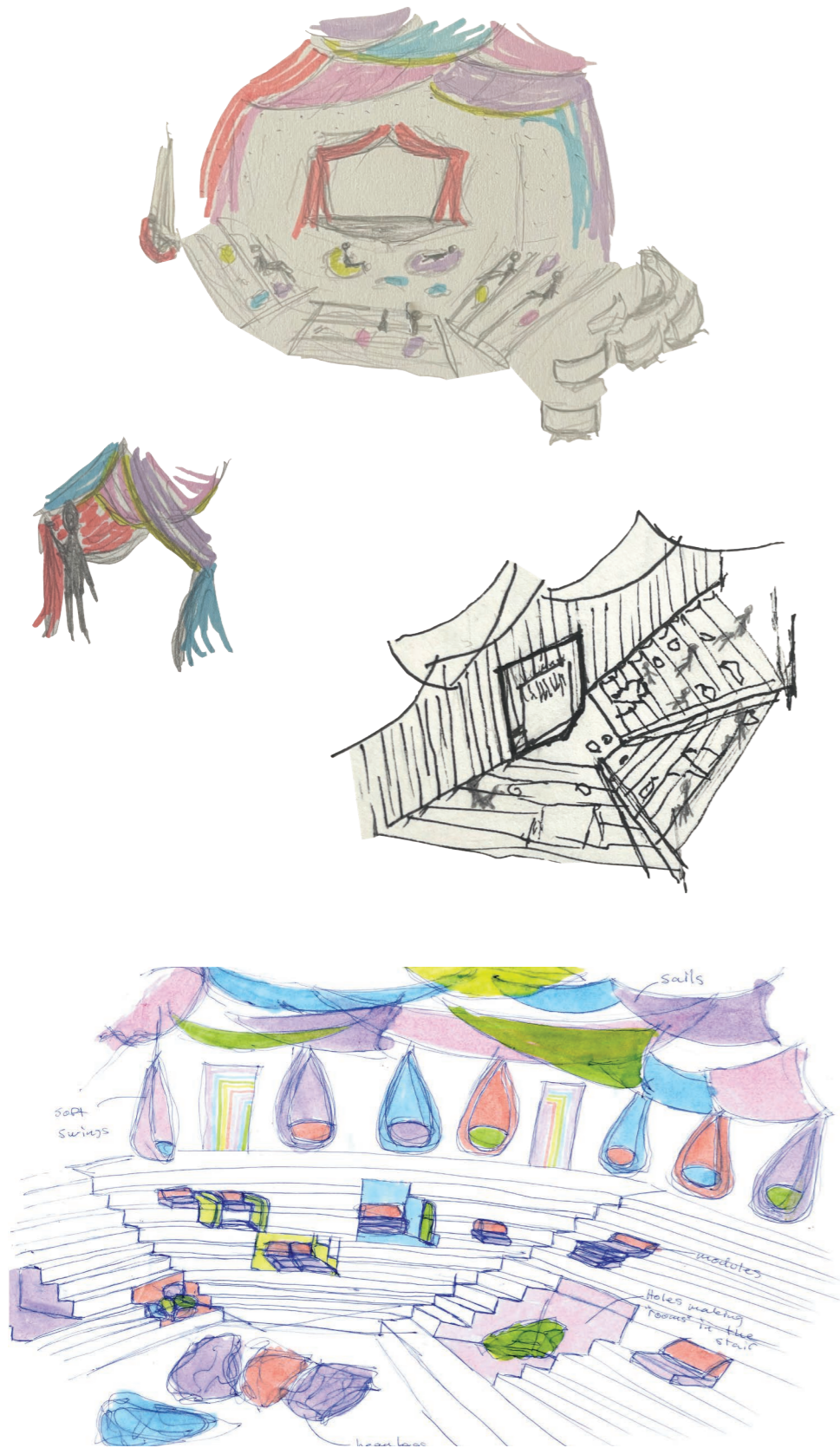
Skiss process

Under den tidiga utvecklingen använde vi oss flitigt av handskisser, ofta med tillagda färger. Färgerna hjälpte till att fånga den lekfullhet som fanns i vårt koncept, medan handskissandet gjorde det möjligt att snabbt översätta tankar till papper. Det användes både för att hitta formspråket och färgsättningen för den yttre volymen men också för att fånga känslan i den inre teatersalen. Det blev ett sätt att lyfta fram det vi såg som viktigt.

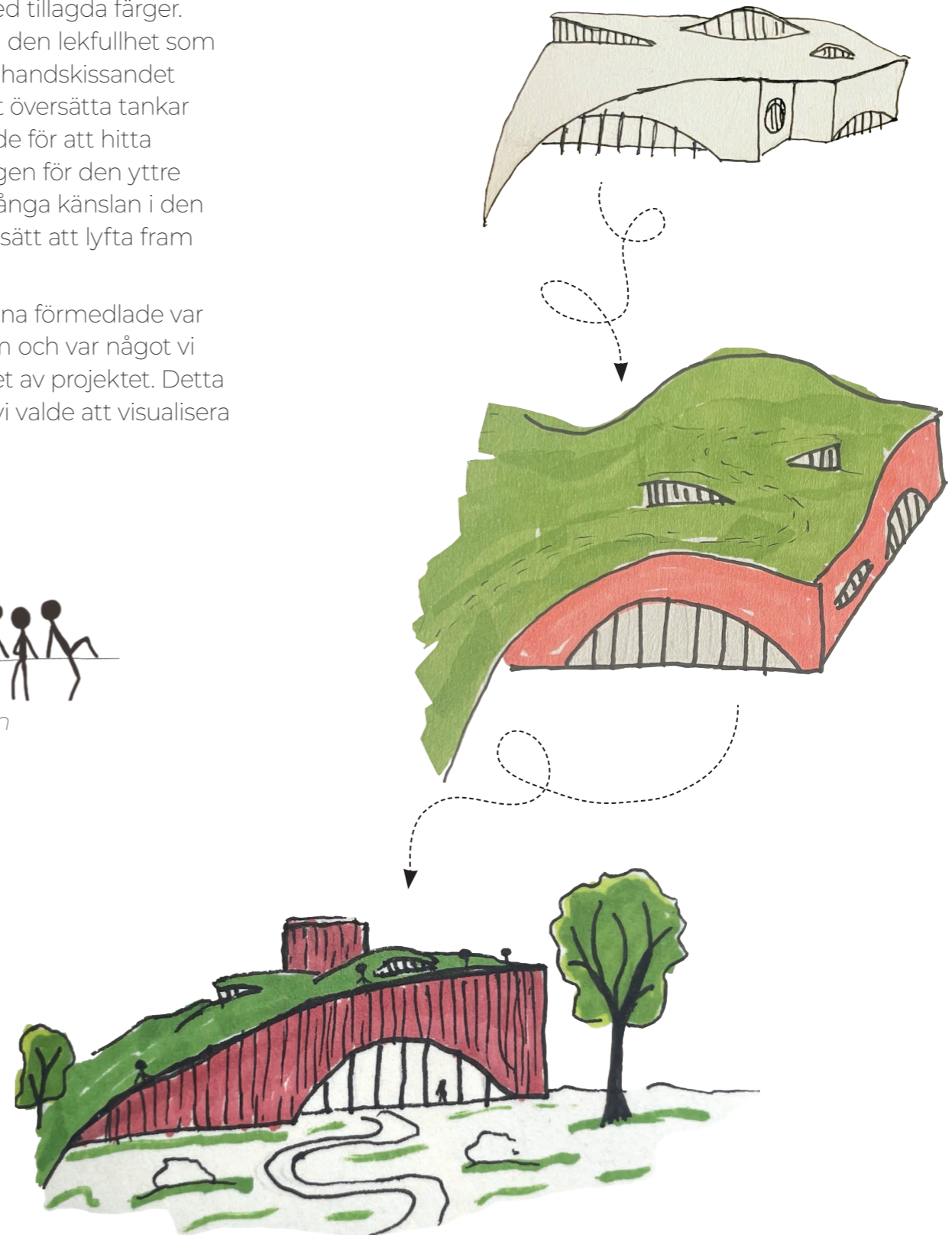
Den känsla som handskisserna förmedlade var det lekfulla i att testa sig fram och var något vi ville ta med oss in i slutskedet av projektet. Detta var en stor anledning till att vi valde att visualisera projektet med akvarell.

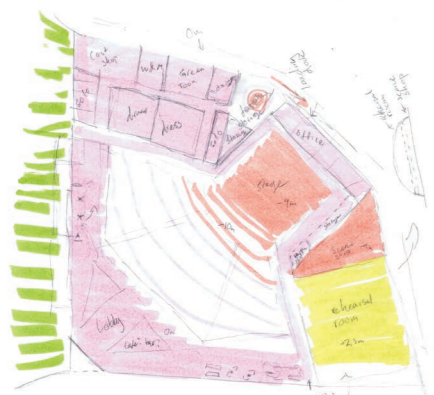


Visar den fria sittplatsen



Hur exteriören utvecklades





Tidig skiss över planlösning

Modell process

Vår teaterbyggnad blev en komplex volym i höjddled, med rum som delvis låg under mark. För att hantera detta användes en fysisk frigolitmodell som enkelt kunde förändras för att testa olika rumsflöden och som hjälpte oss att förstå höjdförhållanden samt teaterns generella volym. I processen gjorde vi också fysiska modeller över de akustiska kvaliteterna och prototyper som vi valde att fokusera på. En modell visualiserade det segel som täcker taket och användes för att förstå hur dessa kan varieras. En modell är av taket för att belysa de ljudkvaliteter som ett jordtak ger. Sista modellen är över sittplatserna för att visualisera de oförutsägbara och personliga sittplatserna som uppstår där.



Teater skiss modell



Prototyp hängande segel



Prototyp sittplatser



Illustration tak

Reflektion

Konceptet grundar sig i en känsla, vilket kan vara svårt att förmedla och detta var en stor utmaning under projektets gång. Vi arbetade mycket med att förmedla denna väldigt personliga känsla av vardaglighet, trygghet och lekfullhet och tog beslut utifrån hur dessa aspekter påverkades. Det var ofta en balans mellan att fortsätta utveckla och att gå vidare i processen.

Arbetsättet med mindre delmål och att redan tidigt tänka kring layout och presentationsmaterial gjorde det lätt att veta vad som skulle prioriteras och hur tydligt saker skulle visas. Det var tydligt vilka delar som skulle representeras och därav vilka delar i projektet som man behövde lägga större vikt på.

Jag tycker vårt projekt visar konceptet tydligt, detta är mycket tack vare de färgval och den presentationsteknik vi valde. Den enkelhet och samtidigt komplexitet som kommer från en flexibel trappa där besökarna själva formar sin sittplats tycker jag tydligt följer konceptet.



Inspiration