5

DESIGN DISCOURSE

5.1 Building Evaluation

5.2 Design Development

5.1 BUILDING EVALUATION

The objective of this proposed Healing Activities Centre is to make it fit for harmonious human utilisation. The Centre will be formulated by the interaction between creativity, intellect and social stimulation. Important elements for a successful building interior are lighting, sufficient ventilation, comfotable interior temperatures and easy circulation.

Before design decisions can be made the building needs to be studied carefully in order to discover all time layers and evaluate the importance thereof. The building evalution will consist of the evaluated old and the new response to it.

BUILDING EVALUATION		
	Evaluation of Existing	Design Response
SITE	The site is located against a busy street (south façade). Deeper into the zoo's side the atmosphere however, quickly changes to being peaceful and quiet (Image 1).	The change in different atmospheres is perfect for the building's new function. The vibe inside the building will react to the existing activity levels.
FRONT FAÇADE	The front, and street, façade is the only façade with spectacular detail. The superstructure is made up of four different building materials (Image 2).	The front façade will be changed in order to better communicate with the street exterior. Details are discussed below under 'windows'. (Figure 90). Signage, street lights and proper pedestrian facilities will further enhance the appearance of the building. The tree, standing right in front of the building should be removed, as it obscures the building (Image 3).
	Silk stone makes up the foundation walls.	
	Sandstone is used for the British coat of arms. (dieu et mon droit: God and my right), the four ledges stretching horizontally across the centre part, the Corinthian capital column, including the ERI (Edward Rex Imperior) initials.	
	Plaster and brick eaves carry the horizontal lines of centre ledges to the building end. (above clerestory windows).	
	Granite makes up the threshold to the foyer space.	
EXISTING TIME LAYERS	Original Plan: this plan shows the southern, easter and west wing as they can still be seen today. The northern wing is also part of the original plan, but is found with different properties. Its appearance, different to the others to the extent of feeling like a later addition to the original plan, would be due to it satisfying a different functional need. The current northern wing can be traced back to the original plan (Figure 94-97).	A new time layer will be added to the building, this time layer being the third one added to the building. The new time layer will speak of a completely different style, thus not making it difficult to separate the old from the new.

Evaluation of Existing (continued)		Design Response (continued)
EXISTING TIME LAYERS	Originally, *Openplaats*, an open place, had been allocated to the end corners of the northern wing. These end blocks firstly have more modern windows, secondly have a different flooring type (parquet) than to the rest of the building, and thirdly, on the outside a line of foundation walls, jumping to a lower level is visible. It can thus be followed that the outer corners were meant to be ouside, stepping down from the interior to the exterior.	The *Openplaats* areas, as enclosed later, will be kept. Wet services will equip the sides with a kitchen and ablution facilities on either side (Figure 93).
	The last visible time layer is that of the partitions added to the inside, which are dicussed inder 'additions'.	This layer is not value adding to the building at all and will be removed for the purposes of the proposal.
SPATIAL ADDITIONS	Courtyard: By having added the this wing extension, the original veranda was detroyed, leaving the courtyard bleak to the eastern side. The overall courtyard atmosphere is broken and lonely (Image 4).	This later addition (1960's), for the purpose of the newly proposed therapy centre, will be removed and the veranda will be reinstated. A veranda roof will be added again, but speaking of a different time layer. A play of light is created by the use of material, casting rhythmical shadows.
		Furthermore, a stage is added in front of the music and art therapy rooms. As these therapy types overlap with dancing and acting respectively, shows will take place inside the courtyard (Figure 79e).

Evaluation of Existing (continued)		Design Response (continued)
		Different levels, materials and textures run throughout the courtyard. A sensory experience is created as sand, pebbles, a water feature, lawn and scented plants are used (Figure 82, 83, 84). All textures have a therapeutic function. The bigger lawn area will be perfect for activities happening outside. Better sensory stimulation results from having the activities outside. The sand pit, as an example, is used for tactile activities. Water serves as visual stimulation or fascination as well as an audio relaxant. Scented plants, especially edible herbs, should be planted in the provided space. the scen of the plants can flow over into tasting them, by going inside the coffee shop, where a special menu includes teas and refreshments. Sensory stimulation is thus carried from inside to outside, physically and emotionally. The senses are thus continually stimulated by walking through the centre, guaranteeing an unforgettable sensory experience.
SPATIAL ADDITIONS (see Technical Drawings: Altered Plan)	Westen wing: These have been added to the original building to try "enhance" the museum exhibition space. These additions are present inside the southern half of the eastern wing. They consist of gypsum wall partitions and timber structures. Two doors have been completely blocked by the additions and can only be found on the outside of the building. Rooms are formed by the additions, are not functional, leaving the rest of the interior spaces awkward and confusing. The later added partitions are in no sense value adding.	As new design proposal, all additions inside the building will be removed. An open, clean space is needed to house the conference room, which will be situated in this space.
	Northern wing: The complete upper floor of the northern wing is divided up by partitions (Image 5). A sturdier partition forms a room in the east, while glass and thin drywalling partitions divide the western side. The western divisions are impractical and circulation throughout them is not optimal .	All later additions will be removed to make space for new partitions, which will be carefully installed accommodate the required functions upstairs.

Evaluation of Existing (continued)		Design Response (continued)
SPATIAL ADDITIONS	Tower' additions: Exhibition cabinets have been added to the ground floor. Partition additions have also been added to the top floors inside the towers, which once again are not logical or practical. The partitions consist of thin timber, which is pierced by glass panels (Image 6).	The additions are not practical and divide the original space into awkward rooms. All additions will be removed in order to create the original open space, which is needed for the proposed exhibition- and admin tower.
	Western façade: A rectangular addition, stretching from the street to the zoo, was built next to the western façade (Image 7). The addition consists of corridor rooms that were previously used for accommodation. They are now either left adandoned or claimed by the homeless. The addition roof stretches against the museum facade and thus covers the wagon door openings (Image 8). The addition was not well thought through and hinders the museum building.	The addition will be removed for the purpose of this design proposal. The addition leaves the corridor space dark and cold. By having the addition removed, firstly one of the two doors on the façade will be able to fully open up again, and secondly, light will fill the interior of te proposed library and seminar room. A facility for outside recreation is also created by opening up the space, allowing good communication between the library and seminar room.
	Eastern façade: Car ports and other shelter structures have been added to the eastern façade. These lack maintenance and are of no value anymore. Uneven blocks also protrude from the ground floor walking level, which do not seem to have any function (Image 9).	All added structures will be removed, leaving the façade clean and unblocked. The protruding concrete blocks on outside floor level will also be removed, levelling the surface for easy walking. A driveway will be added to the east of the building, which will lead from the gate off Boom Street to the main kitchen, where delivery will take place. The building thus has an independant vehicular entrance.
	Basement: The spatial layout is confusing and impractical. A bigger area to the left of the existing staircase can be useful for gatherings (Image 10). The other side however, is subdivided by arches (Image 11), forming a corridor, leading to another 'bricked-in' corridor. This former arched construction is possibly necessary to support the above floor.	The basementstructure will be kept as is, except that the bricked-in arches will be opened up for better circulation and accessibility. A door on the northern side side will be inserted to facilitate direct contact with the zoo. The slope of the site at the back of the building is on the same level as the basement floor.

Evaluation of Existing (continued)		Design Response (continued)
CIRCULATION	The existing circulation is difficult due to the additions, inhibiting circular movement. Cross circulation is therefore almost impossible.	By removing the courtyard addition and reinstating the veranda, movement around the courtyard will be possible. The veranda circulation is extremely important in connecting the individual building wings. Cross-cutting through the courtyard will not be possible, as different height levels keep different textures. The informal audience seating will serve as social centre.
	An eye-catching ground floor wooden staircase in the northern wing leads to the top floor (Image 12). It consists of timber, where newel post and balusters are profiled and painted. The staircase is boxed in at the bottom, where it disappears in the top floor.	The existing staircase is still stabel and is situated in a logical, functional position. The paint on the timber will be stripped, showing the original timber texture and colour.
	A steep timber staircase leads to the basement from the northern wing (Image). It sits in a corner and is positioned under a trap door. No railings are attached to the staircase, almost leaving it as a ladder.	The existing staircase will be removed, as it is dangerously steep for public and animal use. A new staircase will be added underneath the existing staircase in the northern wing. This staircase will lead down to the basement, where Animal Therapy will be facilitated. By placing Animal Therapy in the basement, an easy and strong link is formed with the zoo. The centre therefore reaches beyond its interior to connect within the zoo.
	Identical, mirrored staircases in the towers lead up to the first floor. These staircases look similar to the one in the northern wing. The staircase in the eastern tower is concealed by additional partitions (Image 14).	All cladding onto the staircases and partitions will be removed to emphasise the original state of the staircases. The paint on the timber and vinyl layer on the treads will also be removed. Any worn out tread, which has become structurally unsafe should be reconstructed. The staircase should represent the original.
VOLUME	The greater part of the building contains a floor to ceiling height of approximately 5.8m. The only higher volume is that in the 'library', where floor to ceiling height reaches 7m. A height of 3,7m runs throughout the northern wing.	Sufficient floor to ceiling height allows for mezzanine levels being added to the Dry Art and Music Therapy room. The additional floors provide therapists' offices and more private therapy or practise rooms.
		Inside the library the extra level houses quieter reading facilities, internet and other electronic services.

Evaluation of Existing (continued)		Design Response (continued)
VOLUME		The mezzanine level in the coffee shop allows for further seating and/or storage space.
VENTILATION	Ventilation space underneath the wooden floors allows for sufficient air circulation, which can also be confirmed by the cast iron vents visible underneath the veranda floor in the courtyard (Image). The original plan also indicates this area as 'Crawling Space'.	Sufficient floor and roof ventilation will leave a great deal of the interior cool in summer.
	Roof vents are present all along the different roofs of the wings (Image 16).	
	Room ventilation is minimal due to insufficient openings in the exterior walls.	Cross ventilation is assisted by the added openings in the eastern- and northern façade.
WALLS	The original exterior and interior walls are all lime plastered. An extra plaster, a pitting plaster, is added on the inside of the walls to prevent the later applied paint from being soaked into the bricks. A lime-based colour only can be applied to the walls. The original colour scheme, pink and creme, can be seen where the later applied PVA colour is peeling off (Image 17).	Light partitions will be added to the interiors, without touching the existing walls. A different theme colour is allocated to every room- to repaint the wall and finish them to specificatios, the paint will also need to be lime-based.
CEILINGS	West wing: An important ceiling, the only ceiling to be vaulted in, is left in the northern half of the west wing, which for the proposal will be left untouched and fully exposed (Image 18). 20mm quarter rounds are attached to the additions in the southern half as cornices on new timber ceiling.	The library will be housed in this space, where the interior allows the ceiling to be perceived in admiration. The quality and character of the ceiling adds respect to the room.

Evaluation of Existing (continued)		Design Response (continued)
CEILINGS	East wing: Very expensive and exquisite pressed steel ceilings were fitted in the eastern wing (Image 19). The ceiling was presumably imported from a big company in France, England or Germay. These ceilings contain a deeper, more decorative pattern. All pressed steel ceilings are finished off with a profiled steel cornice.	The valuable ceilings in the eastern wing will be lept and will be able to be viewed closer from the added mezzanine level.
	North wing: a cheaper ceiling was installed here, which consists of 150mm imported tounge and groove Baltic deal ceiling boards. 150x12.5mm timber profiled cornices frame all timber ceilings. 22mm softboard acoustic panels, random drilled, were added to all upper floor ceilings in the north wing (Image 20). All other ceilings in the building are either not original or too damaged to be preserved.	The acoustic panels which have been aded later, will be removed, leaving the original Baltic deal ceiling exposed.
	Other pressed steel ceilings that are worth preserving can be found in the foyer (Image 21), top exhibition floor and top admin floor (Image 22). The names of these spaces correspond to the newly proposed plan.	The lower added ceilings in the front façade towers will be removed to reveal the pressed steel ceilings behind it.
FLOORING	A beautiful black and white chequered imported marble floor covers the current foyer (Image 23). This floor compliments the time in which the building was built. (1899-1902)	This floor is the only marble floor throughout the building. It is still in good condition and adds fine character to the foyer in proposal. The floor will be kept.
	The southern-, east-, west- and partly northern wing contain original 110mm clear Oregon pine flooring. However, battleship lino flooring was stuck over the original Oregon pine floor in the western wing, while the eastern wing's floor was covered in 'Hunt Leuchars & Hepburn' parquet flooring (Image 24). This flooring types flared from 1965-75. The outer ends of the northern wing show a different, later installed parquet timber floor (Image 25). The floor of the northern wing was later covered under carpet.	All later added flooring layers will be removed to expose the original Oregon pine floors.If damaged, the floors will be renovated and treated accordingly.

Evaluation of Existing (continued)		Design Response (continued)
FLOORING	A basement is underneath the middle section of the northern wing. Rough concrete flooring stretches throughout the basement, leaving it cool and uninviting.	Seeing that Animal Therapy will be placed in this space and animals will frequently move through the interior space, the flooring needs to be cleaned easily. It is a north-facing basement, allowing it to be a warm, friendly space. Tiles will be added- these are easy to clean and will not affect the interior temperature negatively.
	Local blue slate slabs make up the walkway surface of the veranda (Image 26). It can be assumed that the slate comes from the Erasmus Kloof quarry. Almost half the veranda slate has been covered by the new flooring material in the courtyard addition. The original slate half is thus lost.	A new veranda walk way will be added, covered by a new, non-slippery flooring material. The new material will speak of its own time, thus allowing the original slate floor full recognition.
	A hand chiselled granite threshold seperates each exterior door from the veranda and interior.	The tresholds are in good condition and are valuable to keep.
WINDOWS	Most windows are only found on the northern and southern side of the north wing. Slightly protruding architraves can be found above the window holes on the exterior. Standard sliding sash windows are inserted into all the window openings (Image 27). The waindows are set back deeply to the interior. Timber State Oregon window sills make the suitability questionable. One sash window, on the top and bottom floor, facing the courtyard can be seen per tower (Image 28).	All existing windows will be kept. Windows will be added onto the eastern and southern façade to enhance interaction with the outside and allow for better light quality. The newly added windows will be light and simple, adding a new time layer to the building.
	More modern steel windows are placed in the northern wing corner ends (Image 29).	
	Half round timber windows fenestrate the top tower floor to the street (Image 30).	
	Two timber casement type windows with small panes can be found in either tower to the street front.	
	Centre pivoted clerestory windows are found on the southern street façade and on both (east and west) sides of the east and west wing (Image 31).	

Evaluation of Existing (continued)		Design Response (continued)
WINDOWS	A customised window has been inserted into one of the recesses next to the main entrance, along the southern façade.	This window will be removed. All other recesses along the street façade will be opened up in order to allow good communication between insode and outside. In so doing the building will engage the passerby.
DOORS	Architraves also frame the top of all the original doors. Exterior double flb (framed, ledged, braced) doors are spaced throughout the exterior courtyard walls (Image 32). Original finger plates are still placed on the doors. Original handles can also be found on most original doors (Image 33).	All original doors will be kept, with the paint removed to celebrate the former beauty of it. All other doors that are added to eastern and northern façade will speak of a new style, a new time layer.
	Two wagon doors can be found on the western façade. The thresh level of these doors unfortunately does not allow connection with the ground level, as the slope results in a fall of >1m.	These doors wil be kept as they are, except that the paint will removed to reveal the original wood grain.
	A wrough iron gate seperates the interior of the foyer with the exterior street scape (Image 34). This gate is still the original, as rivet marks can be seen at all joints.	A further glass seperation to the wrought iron gate will be added to the street's side. This will improve privacy, weather and noise conditions.
	No doors, except a later added double sided flb door is found on the eastern exterior façade (Image 35).	Self manageable doors will be added into the eastern façade, facilitating direct contact with the outside.
LIGHT QUALITY	Clerestory on the south- and west wing are painted black to completely block out any light from the outside. This was probably done when the building was still used as museum to bring 'independent lighting control' to the exhibition space. It is sad that despite all effort to enhance the building, no attempt worked and the building lost a great deal of quality. The changes also lead to the building being cold and hostile.	In order to achieve good lighting, firstly, the paint on all affected clerestory windows needs to be stripped. This will allow the natural light to penetrate the interior, thereby improving the light (lux) levels and increasing the inside temperature.

Evaluation of Existing (continued)		Design Response
LIGHT QUALITY	More light penetrates the eastern façade through the clerestory windows, leaving the space relatively well illuminated (Image 36).	An opportunity to maimize the light of morning sun is lost due to the lack of fenestration on the eastern façade. In the design proposal door openings are cut into the wall, enhancing the interaction between inside and outside. The eastern facade recess location will be used as guide to where openings will be cut in.
	The best light quality can be found throughout the north wing. Windows are spaced generously along the northern façade and all are left uncovered (Image 37).	
	The openings in the southern façade are limited to the windows in the towers and one opening to the left of the foyer opening.	Recesses are also present along the southern façade, of which one is filled with a window. Five more recesses will be opened up, of which two will form part of the proposed coffee shop, while the other three will allow visual access into the wet art space. These openings will improve the interaction between the building user and passer-by on the street.
SUN CONTROL	Asbestos louvres on the eastern and western clerestory windows were added by Udo Küsel, a former zoo director. These are in a bad state and partly disintegrated. These louvres are not functional anymore and furthermore block out any potential light (Image 38).	The louvres will be removed, leaving the clerestory windows exposed and allowing light to enter the interior.
		The new veranda roof will be added to where the courtyard addition will be removed, thus occupying the same area, just treated differently. The pavillion roof will therefore fully cover the stage.

Evaluation of Existing (continued)		Design Response (continued)
SUN CONTROL		A partition is formed along the edge of the southern veranda, leaving the inside veranda more private. This will screen off the ablution blocks on one side and add a sense of security. This particular veranda strip will be used guring the night aswell, when residential guests wish to move between the dining hall, ablution and accommodation. It therefore should be adsolutely safe and confortable. As it is the southern side of the wing, it will tend to be colder and darker. To compensate for this, the addition will be well sealed and insulated and alters with light penetrable sections.
		Sun control is also added to the door openings on the western façade. This control system can close up against the existing door or stretch open to block out the sun.
ELECTRICITY	Only partial evidence of elecrical lighting can be seen inside the building. The first clue being in the foyer, as one enters the building from the street's side. An old chandelier is still hanging from the ceiling (Image 39). Also an exposed elecrical socket sits on the wall leading from the foyer into the east, where numerable wires protrude (Image 40).	The old chandelier has character and will therefore be restored and kept in place. New, appropriate lighting will be inserted throughout the building, serving each specific function. Together with this, the building needs to be rewired completely to make it fit for the proposed uses. The new wiring should run above ceiling level and in the crawling space under the wooden floor. The northern wing has the least heritage value. If necessary, wiring can be chased into the walls.
	In the eastern wing, fluorescent light fittings are suspended from the ceiling. The fact that fluorescent lights were added speaks of a later addition (Image 41).	
	Two fluorescent lights in the eastern side of the southern wing permanently shine dimly.	
	The last indication of electrical light in the building is in the northern wing, where more fluorescent and other light fittings were added. It is therefore a mystery as to where and what exact wiring runs throughout the building (Image 42).	

Evaluation of Existing (continued)		Design Response (continued)
WATER & SEWERAGE	Not a single original toilet is found in the building. A toilet has been added later to the ground floor of the northern wing.	Male ablution facilities are added in the north-western corner of the building, while the ladies' ablution fills the northern wing next to the dining hall. An ablution room for disabled seperates the two. All together 14 toilets, 30 basins, nine showers and five urinals will be added. The old existing sewerage and water pipes should be removed and new pipes added instead. The proposal shows a duct on the ground floor ablutions that hides all pipes and takes them to one municipal connection point. When installing the new pipes care should be taken as not to damage the old building.
	100mm galvanized vent piping was used in the eastern tower, possibly leading water from a gutter on the central foyer roof. These pipes pierce through the original ceiling in the towers (Image 43).	
	The only other signs of water pipes are firstly those of the two hand basins found, one in the northern wing and one in the western front tower (Image 44). A 100mm LCC (London County Council) cast iron vent pipe, which is still sealed with lead, leads up from the bottom floor and punches through the original ceiling in the north wing (Image 45).	
	A sewerage pipe is suspended from the ceiling in the basement. Other pipes are also found there that run along side the sewerage pipe (Image 46).	
WATER DAMAGE	The building, as found now, is in derelict condition. According to the book *Building 100*, the building suffered from irreparable pipe burst damage.	Evidence of this, however, is not obvious throughout a great part of the building. Basement: water marks can be found on the floor.
		Courtyard addition: timber beams and gypsum ceiling material is left sagged and broken. Throughout most of the building visibility is poor, as the light is blocked out (Image 48).
OTHER	Boxed-in parts sit inside the outer walls of the towers. These stretch from the ground floor through to the top floor. It can be assumed that original fire places are behind these boxed. Also, chimneys on the tower roofs confirm the existence of the fire places (Image 47).	All boxes will be removed to expose the fire places to the interior. If the fire places are only accessiblr from one side, the fire place in the western tower will be opened up, so it is accessible from both sides- the coffee shop and exhibition. Floor protection will be added in front of the fire place, if not yet existing.

5.2 DESIGN DEVELOPMENT

5.2.1 Macro Site Development

Site plan

It seems that the former Nature Cultural History museum is just occupying needed space on the zoo property. The buildings around it thus move closer and closer, almost suffocating the museum building. The space surrounding the building should thus be used optimally. Currently the only vehicular access to the building is from the zoo's admin side. Pedestreian access into the bulid-ing is possible through the front wrought iron gate or the later added single door on the north-east corner.

Two gates are incorporated into the original fence along the street front; a gate set further in gives access into the zoo. The latter gate will serve as delivery en-trey to the main kitchen. All gates will be reinstated in order to simplify access onto the Activities Centre's site. The Centre will thus function independantly. A deck will be built in front of the two wagon doors on the western facade to allow access into the building. The two rooms (library and seminar room) will thus be linked from the outside. A door will also be inserted into the basement, facilitat-ing direct contact with the zoo. Pedestrian access will therefor be possible from four different sides. (Figure 72)

Zoo links / routes

Tours will be led through the zoo as part of the received therapy. The aim is to also have activities in the zoo, auch as Bird Calls (see SI), and having direct contact with therpeutic animals. Such animals would include tame elephants, horses and other appropriate zoo animals. The choice of animals will depend on the therapist and client.

The walkways should trigger the senses by for example, having a destinct tex-ture that will give off a specific sound when walked on; or be accompanied by a scented plant. The goal is to have walkways that are easy to read, easy to feel or easy to smell in order to automaticall yalso guide the sensory impaired clients. The signage should link up with the design of the walkways. (Figure 73)

Figure 73: The colour-coded routes lead from the Healing Activities Centre to each specific therapy animal.

Signage

The new signage installed through the zoo should be unique inbetween the already existing signage, allowing easy recognition and orientation. Each route to a specific zoo animal should be colour-coded. Therapy information points should also correspond with the specific colour.

Figure 72: Vehicular and pedestrian acces to the building

5.2.2 Micro Site Development

Interior Space Allocation

As the brain is divided into certain areas for processing the sensory information, the interior of the Activities Centre will also consists of specific zones for the different therapy types.

Most zones will have a balance of visual stimulation, suiting all patients. Every zone will have an individual theme colour, leading to its own identity and character. (Figure 75) Each space should be flexible enough to integrate all, but also transform into private spaces to only accommodate certain patient types.

Apart from the above mentioned zones, the centre needs other zones too to be fully functional. These include the reception and waiting area, the exhibition space, an admin block, accommodation facilities, delivery point, cleaner's store room and ablution facilities. (Figure 77)

Building Plan

The main therapy types that needed to be accommodated were Art Therapy, Music Therapy, Animal-Assisted Therapy and Aroma Therapy. Each therapy type requests different spatial requirements.
Animal-Assisted Therapy was placed in the basement so that there would be enough space for all individual animals and their owners. In addition, the natural ground level drops by one storey from the street- to the northern facade, allowing a direct link to the outside zoo. From this point also, groups can meet to go to specific animals in the zoo for therapy. (Figure 73, 76) The placement for AAT is slightly seperate from the rest, suiting those to whom animals do not appeal. (Figure 74, 76)

Art therapy was split in two- the Wet Art and Dry Art. Wet art was placed in the eastern end of the street facade. The newly inserted 'window boxes' will alow the passerby to be drawn into the space, linking the outside with the inside. New doors are added to the eastern facade, where the participants have the freedom to move outside on the deck. The Wet Art room also provides for a corner, where aroma foot baths can take place. These are of course moveable and can happen anywhere. Placed in the Wet Art room, he scent will travel out luring the pedestrian in. All wet types of therapies are grouped in this room. (Figure 74, 77)

Dry art is located in the southern half of the eastern wing, having direct acces to the Wet art room. This room makes spaces for occupational therapy forms and quieter therapy. Due to enough floor to ceiling height (5.8 m) a mezzanine level is added, providing for additional therapy rooms and offices. The mezzanine system is later dicussed in detail. As art therapy overlaps with drama, provisions for a stage are made. (Figure 74, 77)

Music therapy in turn flows over into dancing performances. Art- and Music therapy are therfore placed next to each other, so they can share a stage. Moreover, these two therapy types are placed in the eastern wing, which has been damaged by the former courtyard addition. (refer back to 'building evaluation') As a result, this wing allows for a greater design intervention. (Figure 74, 77)

The northern wing's ground- and first floor are seen as more private and are also treated accodingly. These floors would accommodate groups that book the centre for a specific time period. The main kitchen would provide them with meals, while it can also compliment the coffee shop. (Figure 74, 77)

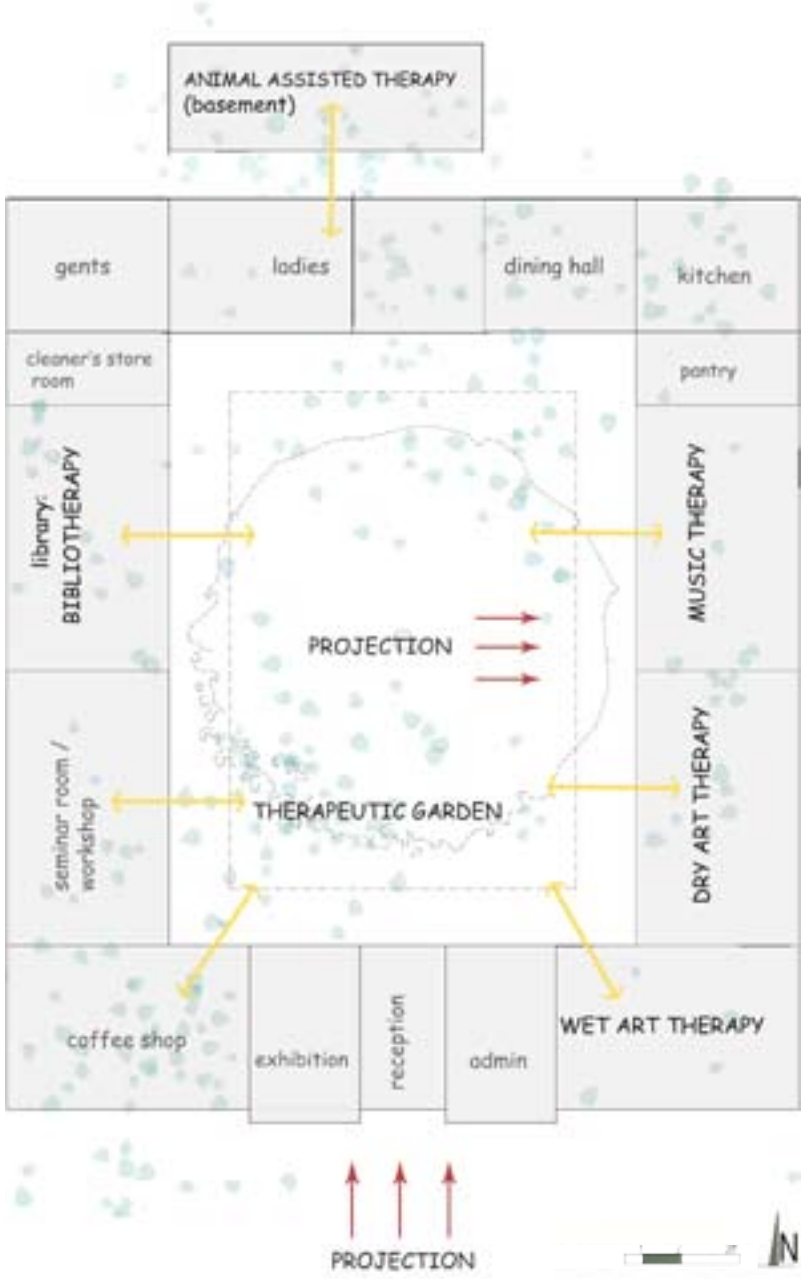


Figure 74: Therapy Allocation in Healing Activities Cente

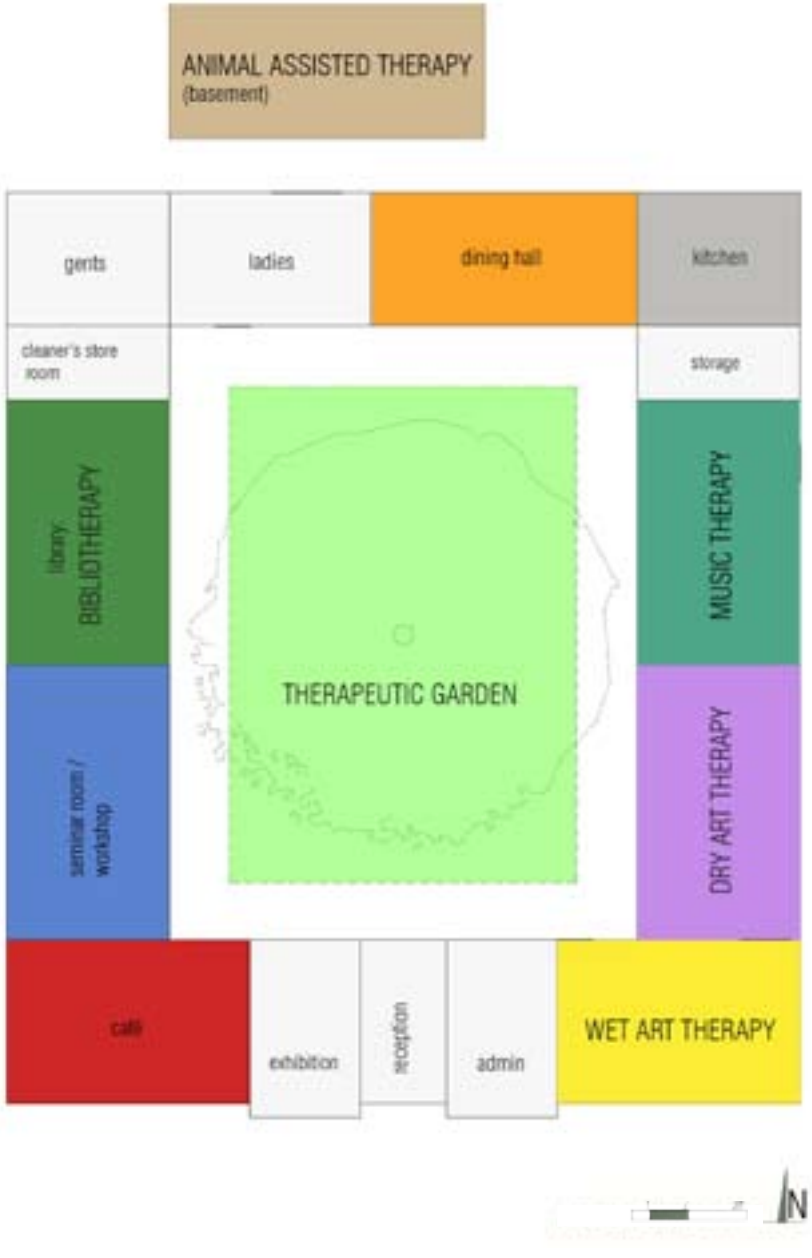


Figure 75: Colour Placement in Cente

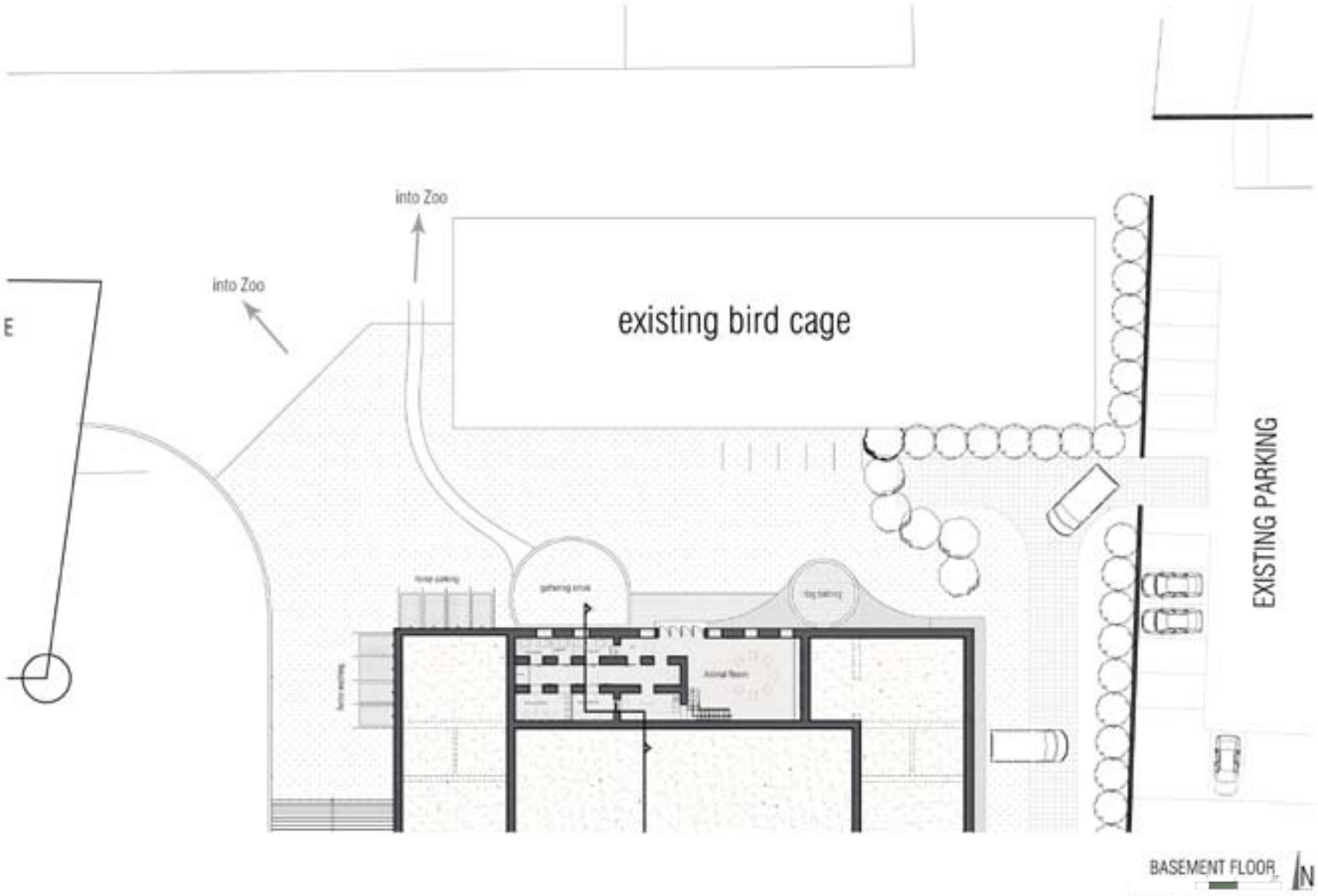


Figure 76: Basement plan linking into zoo

Figure 77: Ground Floor Plan of the Healing Activities Centre

The veranda will be reinstated, allowing circulation along the perimeter of the courtyard. This new floor will consist of Quartz Flooring, which is a suitable material for an inside/outside setting. Protruding from the veranda floor will be the stage. The 10,5x6m performance area will be constructed to meet 'spring timber floor' requirements. This is necessary as the dancers' feet should stay impact protected throughout performances (Figure 78a-c).

The stage is covered by a Pavilion Roof, which takes form of the prior courtyard addition. In so doing, the later added time layer is remembered, but improved. It is a light element which is added to the courtyard, not touching the existing wall. The height of the roof dramatises the stage. A modern element is added to the courtyard, emphasising the old and the new (Figure 79a-e). What's more, is that the construction material of the pavilion roof is used to fix tracks to it. These tracks contain automated screens, which can slide out to form the stage scene. Also, the inner screens can swivel, thus creating yet another stage setup. All screens are Grandview projector screens, onto which the back drop image etc can be projected. (Figure 80a, b) A tree house will be built into the existing London Plane tree in the centre of the courtyard, in which the projector, stage lighting control and other technical equipment will be kept. (Figure 81) The stage setup is flexible, allowing for any performance requirement.

Different levels and textures make up the courtyard. The aim of the courtyard is to bring all therapy types together, in order to optimize sensory integration. A sand pit runs along the western veranda edge. 'Chess' blocks, which are on the same height level as the veranda floor, are imbedded into the sand. Coffee tables and chairs will fill this surace as continuation of the coffee shop. (Figure 77, 82)

A pebble bed lines the northern edge. Water spouts are strategically placed inbetween the pebbles, so that water squirts form a pattern. This pattern changes height and rhythm, almost playing with onlooker. The sound of the water squirts collapsing onto the pebbles is therapeutic and will affect any person in the courtyard. (Figure 83)

An amphitheatrical line shapes the central seating area. A circular seating level unfolds in front of the stage, which is split into two heights. The higher seating level is a lawn bed which stretches deeper in between the sand and pebbles; the other the pebble bed on which a masonry seating surface is mounted. The setup thus cater for all ages, invited by informal, spontaneous seating. The lowest courtyard level, also biggest area is topped with lawn. Many of the SI activities would take place on this level, but also on all other courtyard levels. (Figure 84)

Figure 78(a): Perspective view of stage in context

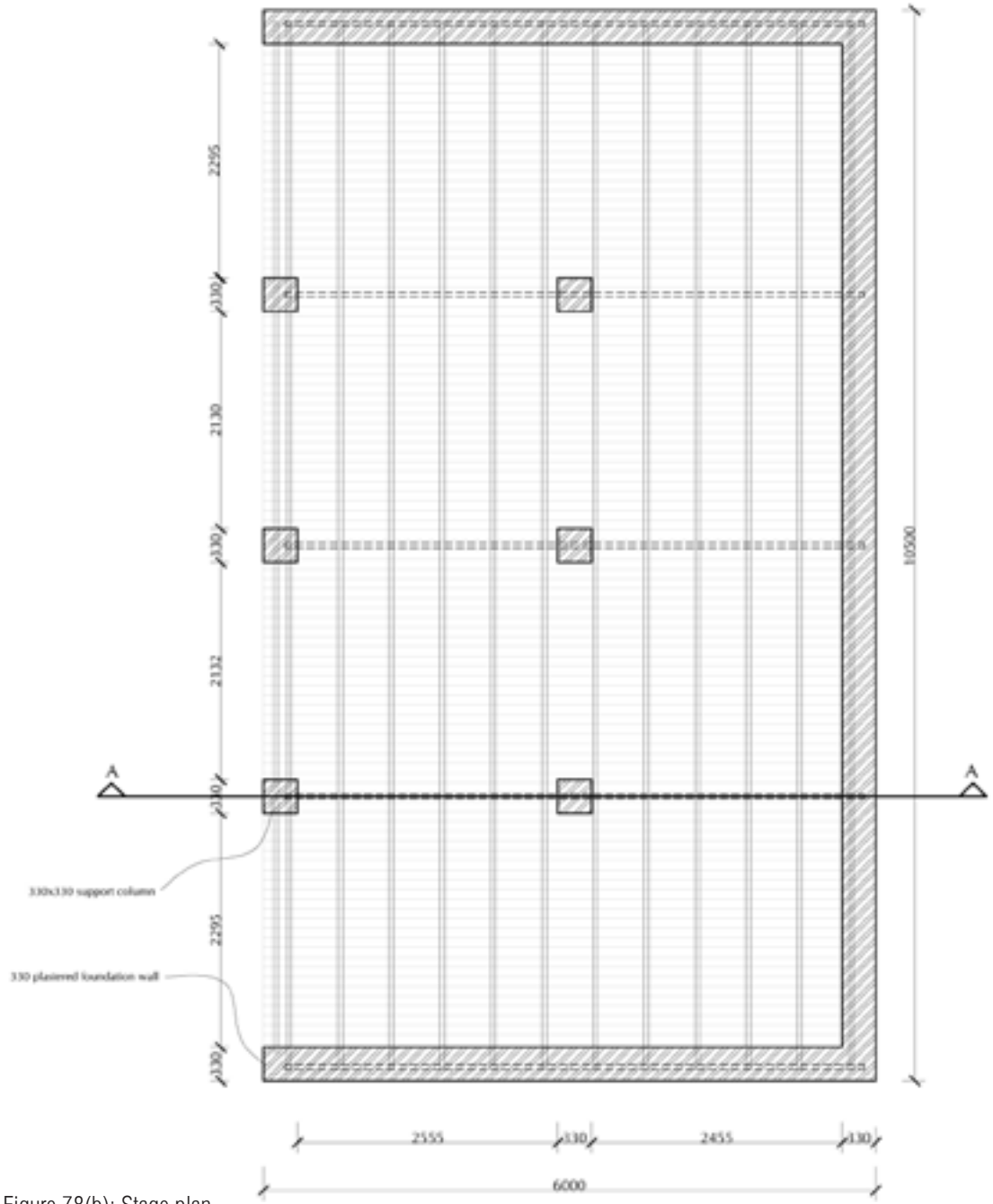


Figure 78(b): Stage plan

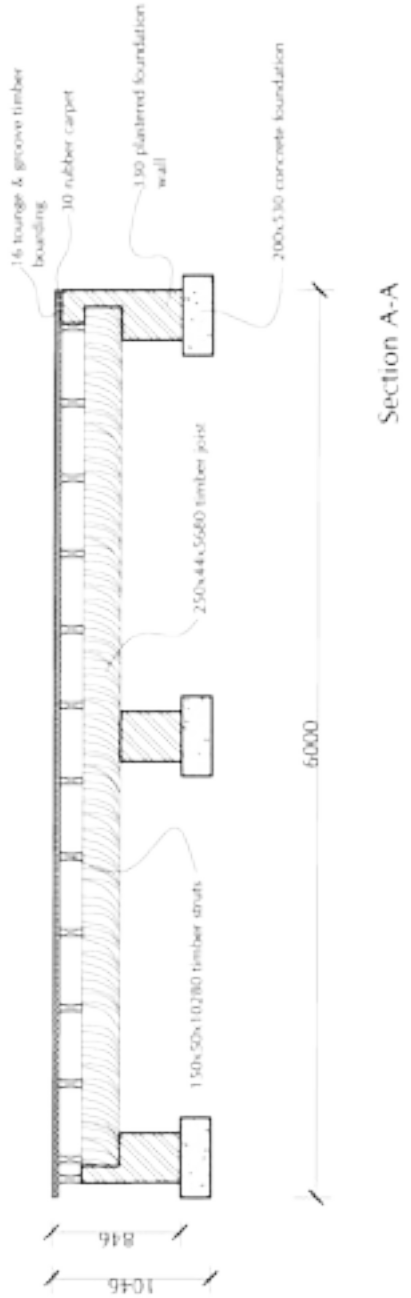


Figure 78(c): Stage section

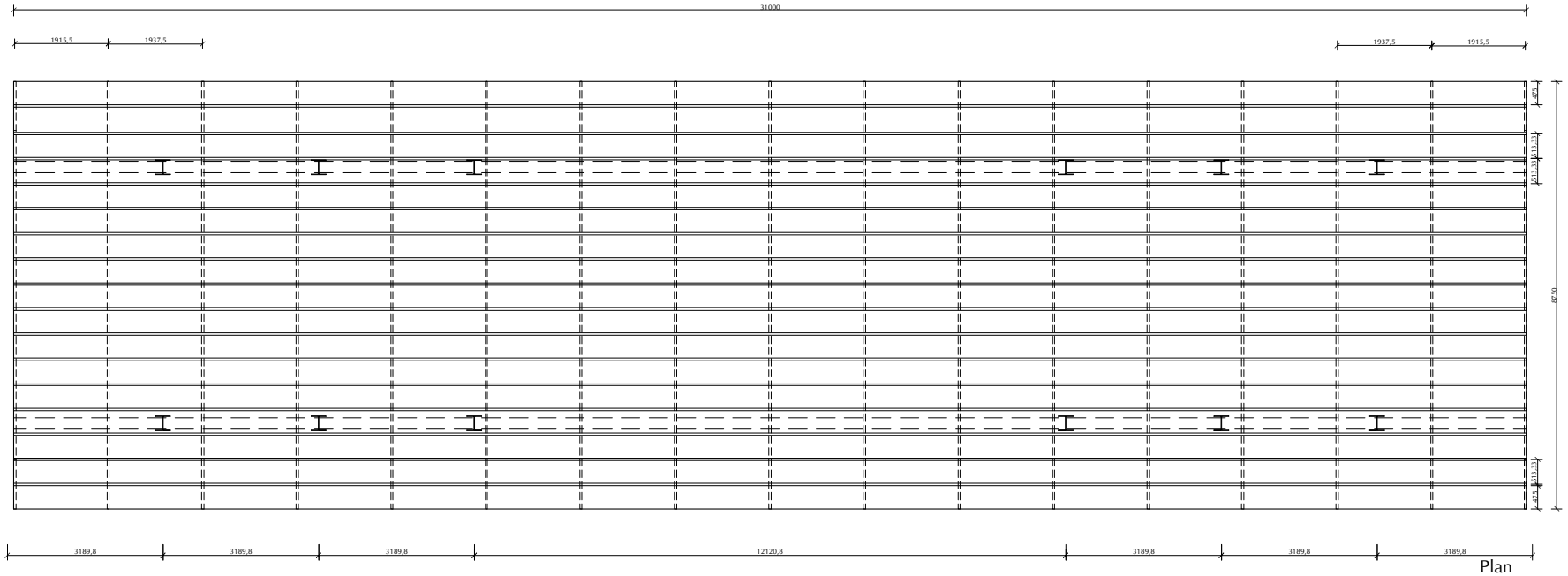


Figure 79(a): Pavilion Plan

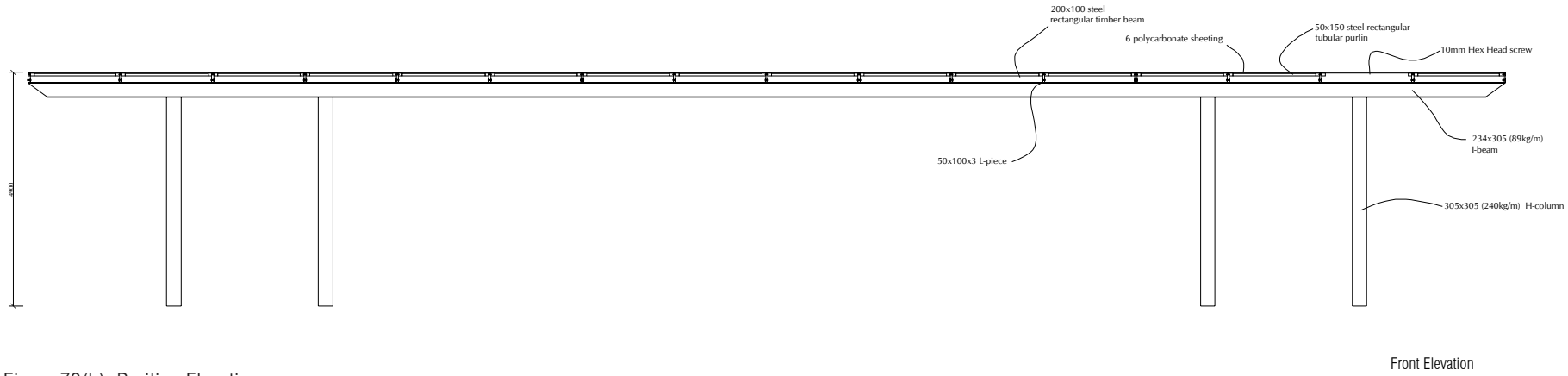


Figure 79(b): Pavilion Elevation

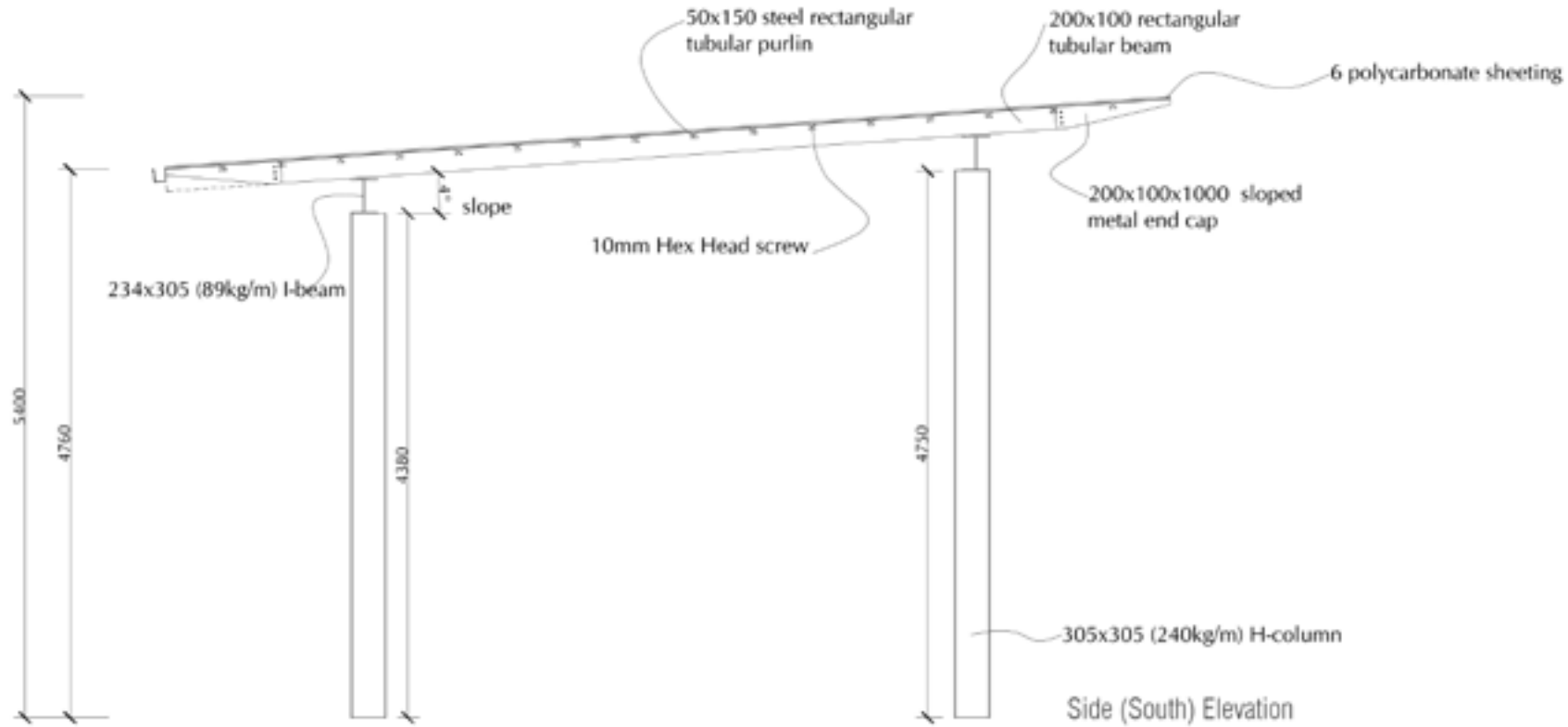


Figure 79(c): Pavilion Side Elevation

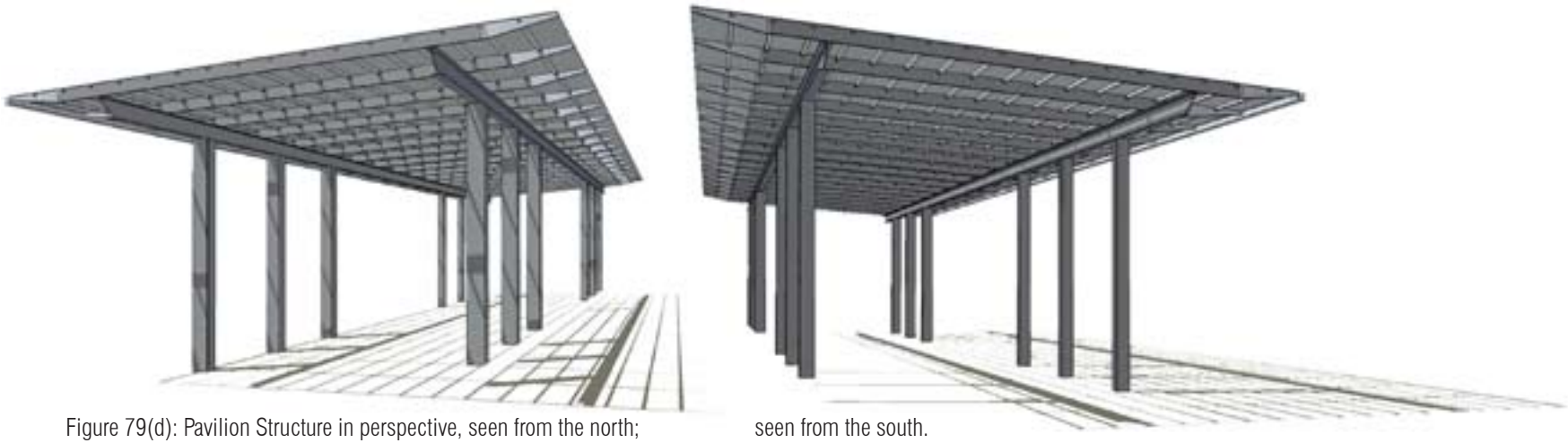


Figure 79(d): Pavilion Structure in perspective, seen from the north; seen from the south.

Figure 79(e): Pavilion Structure in context

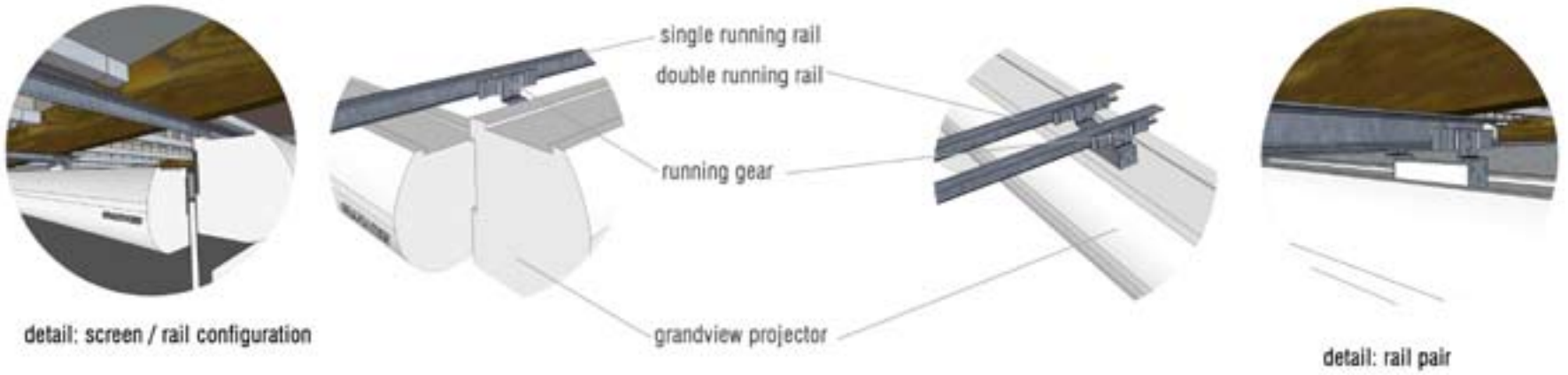
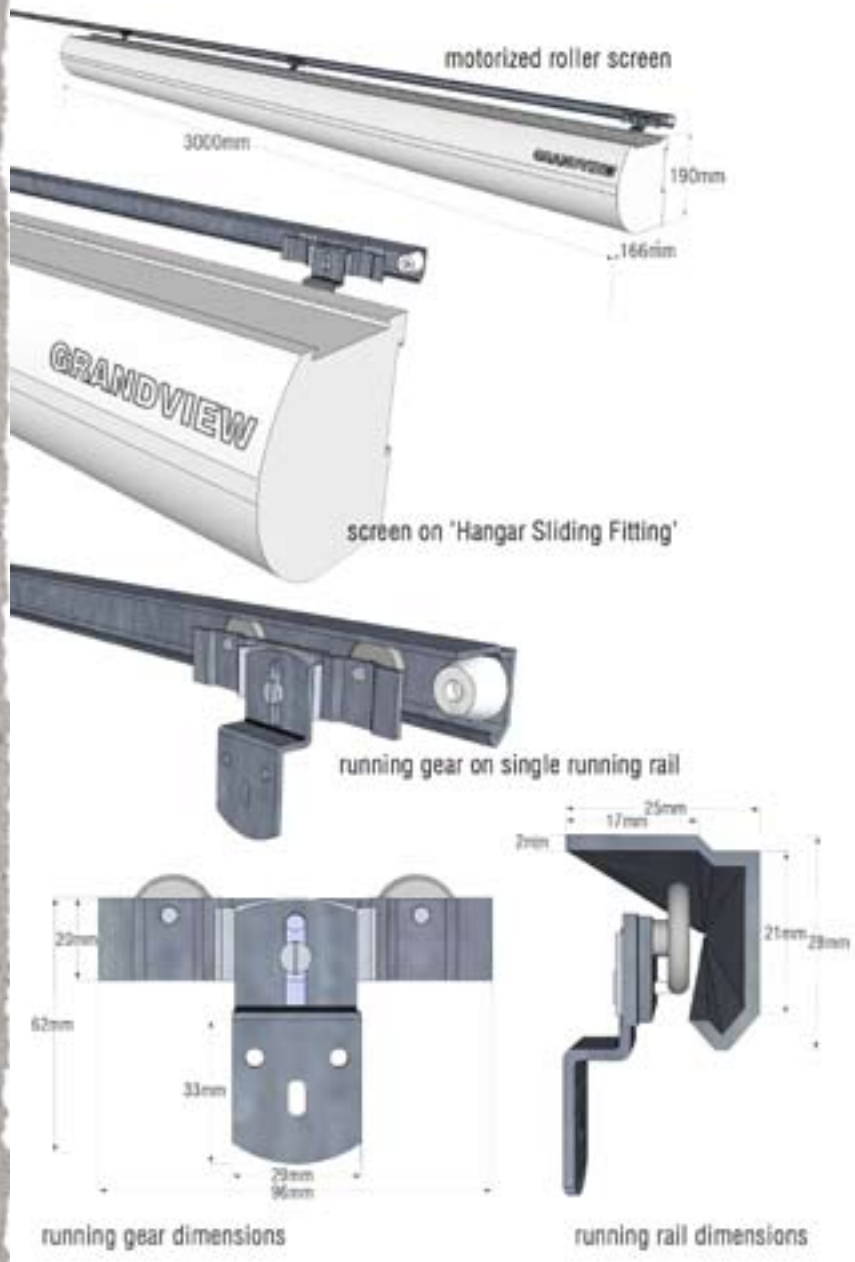


Figure 80(a): Assembly of the Track System



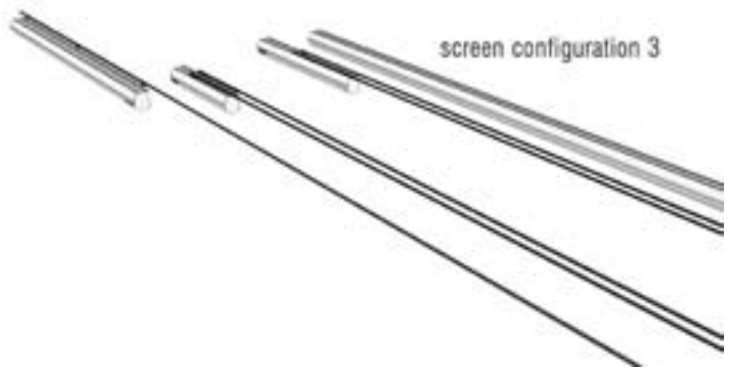


Figure 80(b): Pavilion roof Track System

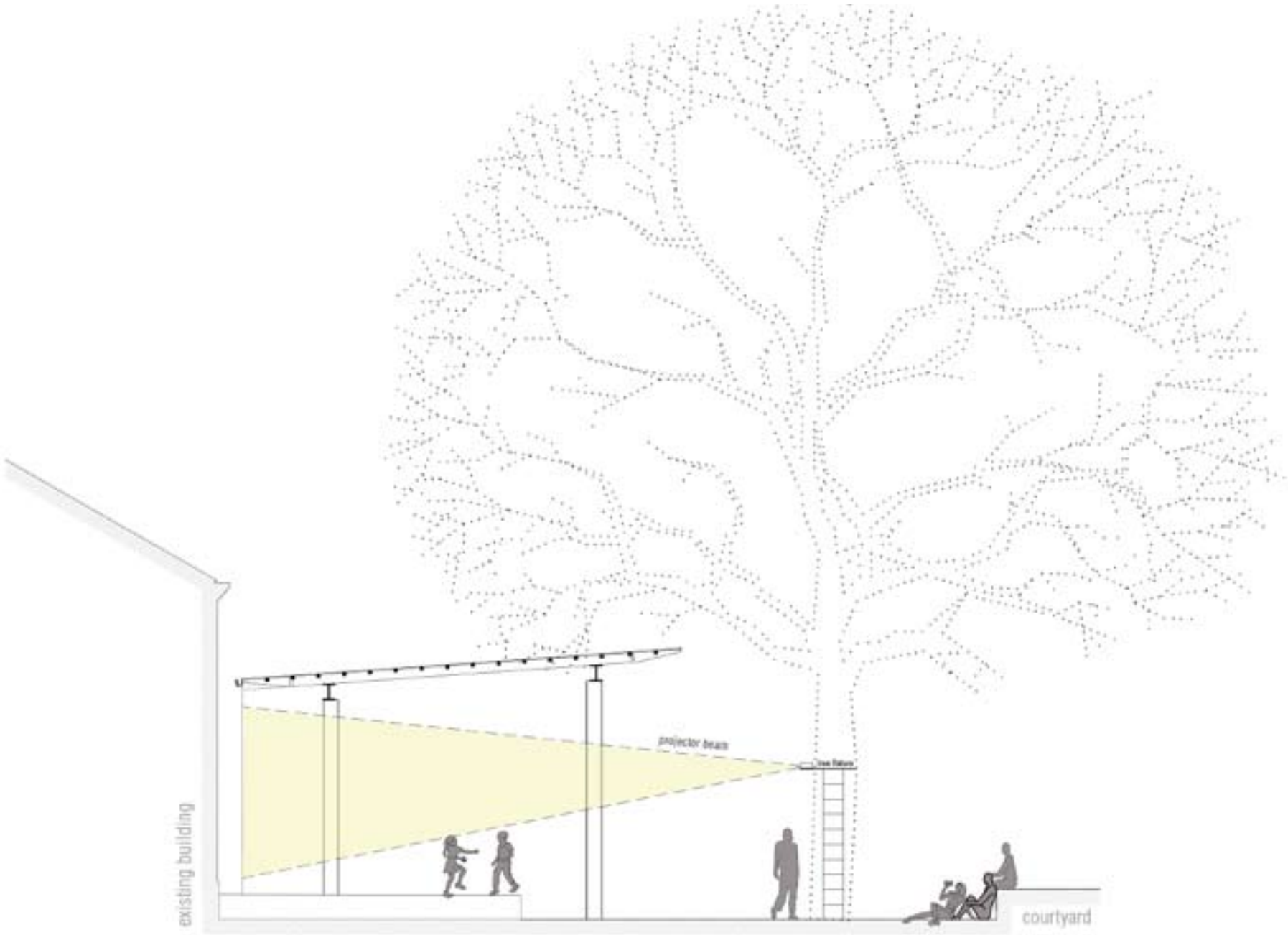


Figure 81: Projection onto stage

Figure 82: Extended coffee area into courtyard

Figure 83: Pebble bed and water feature. The different hight levels create seating opportunity.

Figure 84: Different levels and textures inside courtyard

5.2.3 Interior Design Development

Name / Identity

The Centre will be named *Healing Activities Centre*. Patients going to the centre will receive healing via activities relating to the different therapy types. (see Therapy Approach: Chapter 3) As mentioned before, each room will have it's own theme colour, lending it its own identity. In order to achieve the centre's identity, the names of all rooms will start with 'healing'. Example: Healing Café, Healing Art, Healing Music etc.

Foyer

This space serves as an orientation point, where visitors are received by the receptionist and led to their particular destination point. A waiting area in the front allows visitors to have a seat, either while the contact person is called, while waiting for the patient to finish therapy or while waiting to get picked up again. The receptionist will address all traffic coming into the building.

Exhibition Area

To the west of the foyer, the exhibition tower can be found. As the patients produce art pieces during their therapy session, their art will be exhibited in the 'Healing Exhibition' tower. Exhibiting the art aids in healing the patient, by him receiving recognition for his work. The art works can also be sold, depending on the consent of the owner (patient). A variety of art will be displayed, such as paintings, drawings, sculptures, clay ornaments, puppets and other artefacts relating to craft. Special exhibitions can also be arranged, for example, a Christmas Market, where the art will be sold, promoting the Activities Centre and the artist. The exhibition space will flow from ground floor up to the first floor, where wall openings will allow the viewer to look down into the 'Healing Café', into where the art will also spill over.

Art Café

Moving further west from the exhibition, the visitor will enter the 'Art Café'. This café will serve light meals and snacks, such as sandwiches, pies, salads, soups, muffins and cakes. The food types will be sourced in on a regular basis and of a type that is ready made. This is essential as the kitchen in the café will not be able to handle any bigger orders. The kitchen, although handling small meals only, will need an extraction fan. A 1,8x1,2 exraction canopy will be inserted at the northern boundary of the café kitchen, where heavier meals will be prepared.

Seating units are arranged on the ground and mezzanine floor. Here art will further be promoted, in so combining it with the art of coffee drinking. A new coffee drinking experience is created. (details are discussed under Product Design) (Figure 85)

Also, the fire place will be opened up, lending the interior a warm welcoming atmosphere. The fire place, having an almost hypnotic effect on the onlooker, will furthermore lead to healing or escaping. The coffee drinker is again confronted with art in the columns supporting the mezzanine level. (see product design)

When upstairs, the client has another visual link to the 'Healing Exhibition' next door. By looking down, an overwiew of the café is achieved. From this level also, the coffee drinker can look out onto the street and in his mind be a part of those activies. The interaction between inside and outside is made possible by the opened recesses. (see also Building Evaluation: windows) The mezzanine level will experience a different, a quiter atmosphere.

Figure 85(a): Ground floor plan of Art Café

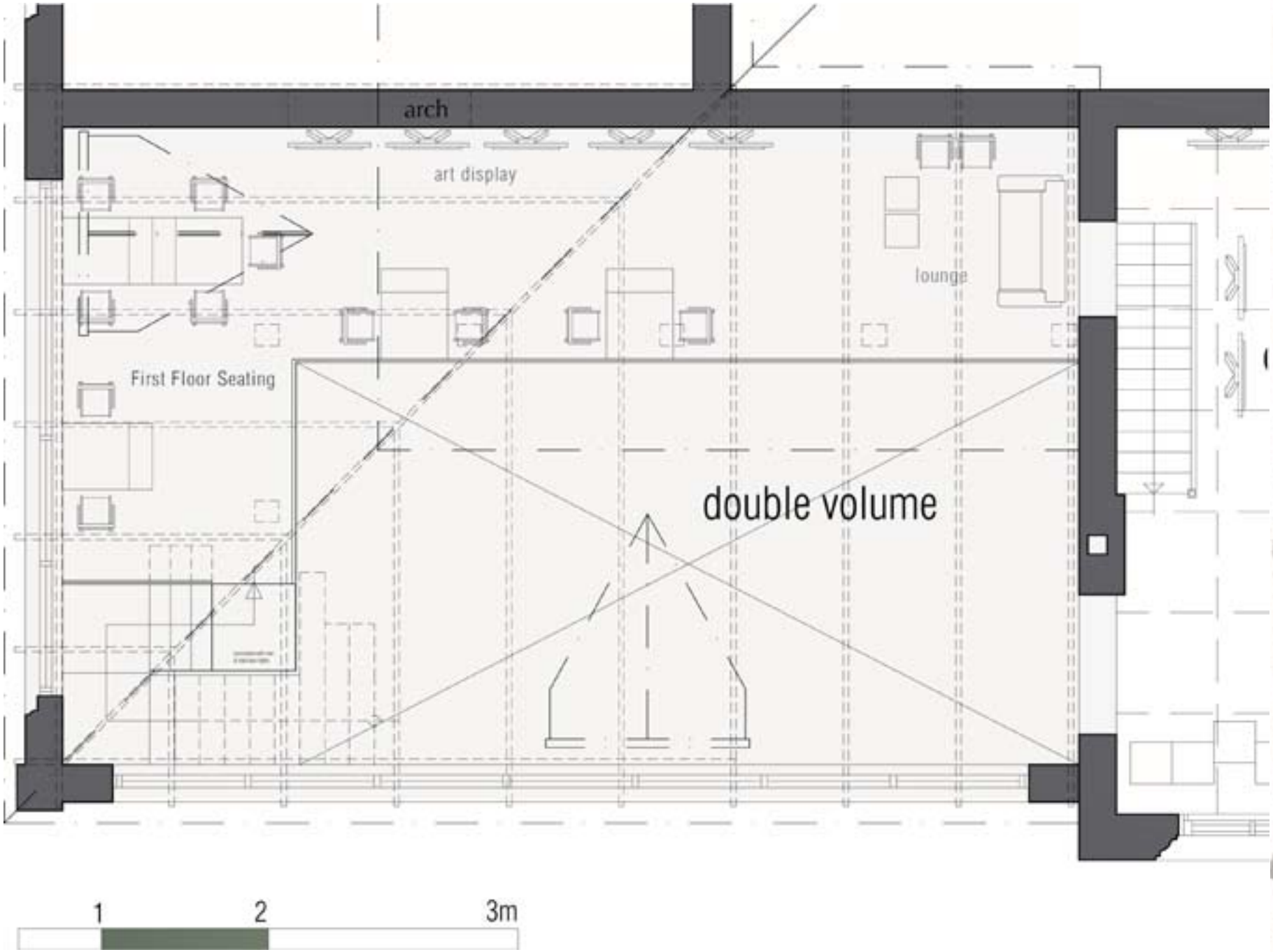


Figure 85(b): First Floor Plan of Art Café

85(c)

85(d)

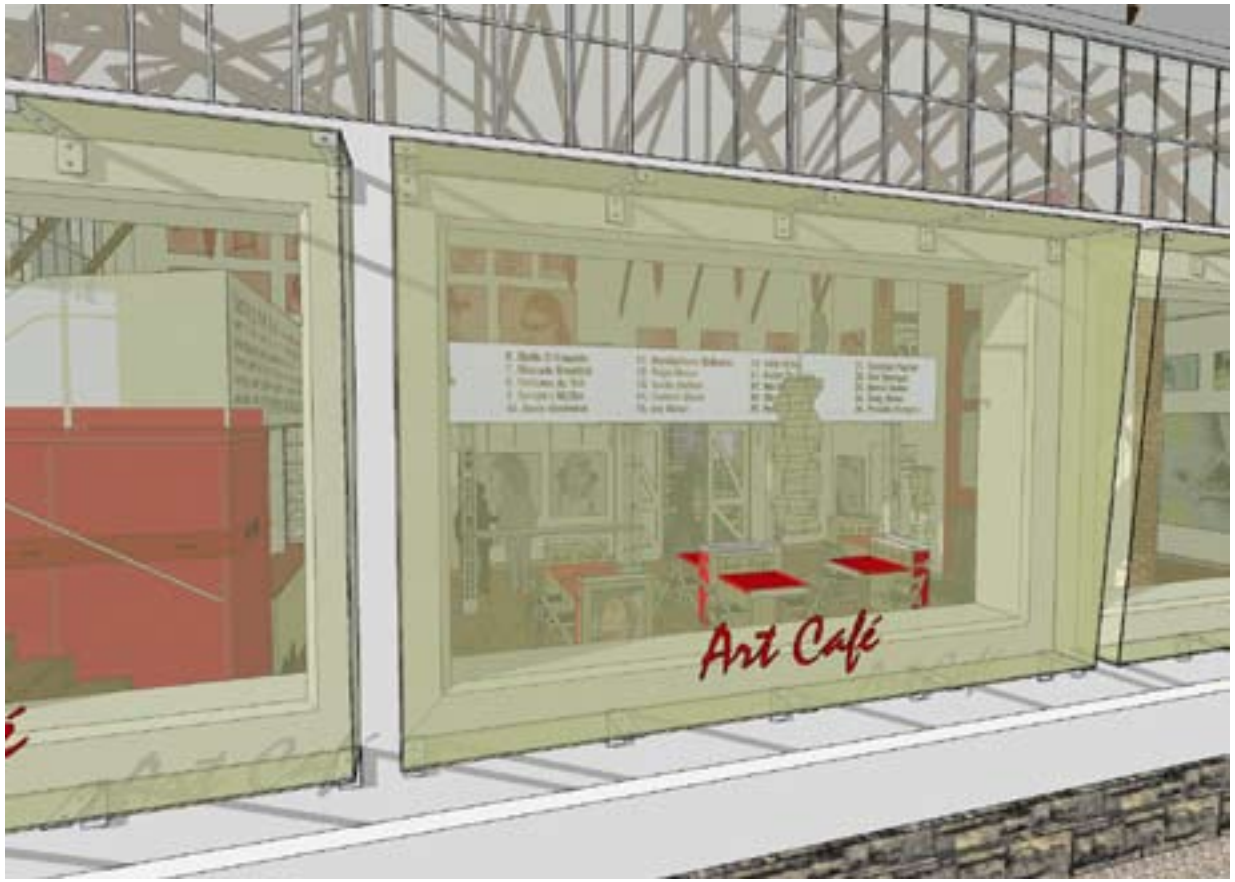
85(e)

Figure 85(c): View into Art Café from staircase

Figure 85(d): Perspective towards kitchenette underneath mezzanine floor

Figure 85(e): View into Art Café from the 'Healing Exhibition'

85(f)



85(g)

85(h)

Figure 85(f): Exterior view into Art Café

Figure 85(g): Perspective onto mezzanine floor

Figure 85(h): View towards adjoining door and mezzanine gallery

Admin

Next to the foyer on the east, the admin tower can be found. Here, the managerial staff and event coordinators would be seated. Their job would include to organize of events, such as the SA Chess Tournaments, bridge competitions, work shops etc. Work stations are situated at the bottom, while the top contains staff meeting- and storage facilities. The admin tower and receptionist in the foyer will work well together as they are placed adjacently.

Main Kitchen

Meals and other necessary beverages will be prepaired in the main kitchen. The meals are however, aimed at a different user group than the café. Groups, for example, work shop members, team building groups, school groups etc would receive their foods and beverages from the main kitchen. Enough seating for a group of 27 is provided in the dining hall neighbouring the main kitchen.

Seminar Room

The above mentioned groups would make use of the Seminar Room. In addition to those groups, the room will be filled by the members participating in the chess tournaments, bridge competitions, lectures, work shops etc. The eastern inside wall is kitted with a Grandview roller screen, onto which can be projected. Different furniture arrangements can be accommodated in this room, as shown in Figure 61. Rows of chairs can be set up in order to house a audience, while the same chairs can also be placed around tables used during work shops. The tables should be of such a type, that they can fold away easily and be stored in brackets against the wall.

Accommodation Room

Groups that booked the centre for, example a week, need accommodation facilities. These can be found on the first floor in the northern, more private wing. 14 beds are placed in the communal bed room, which could double up as bunker beds and provide for 28 sleeping facilities. When having entered the bed room,two toilets, one on either side can be found. To the other side of the bed room is a communal lounge, which holds a television and games. Here, the visitors are encouraged to have casual conversations.

Product Design

The seating unit consists of a container which unfolds to hold a table top and three chairs. The table top consists of red U463 perspex, into which a leuco dye is mixed while the perspex is still in a matrix stage. The dye is a powdered microencapsulated thermochromic dye made from encapsulated spiropyranes of fulgides. When leaning onto the table top or placing hot mugs etc onto it, the dye will react to the temperature rise by reversibly changing colour from transparent to coloured, eg. white. In so doing, the coffee drinker ‘interacts’ with the table top when it reacts to the temperature touch, giving back personal information.

The proposed chairs are alraedy on the market- the specific one chosen folds flat to 40mm thick, are 440mm long and 920mm high. (Sold at Mr Price Home) Each seating unit can accommodate one to three persons. On the top of the seating unit is a glass box, which serves as display box for artefacts. The display box can be stocked by opening the container door in order to be able to pull out the display drawer. This would mean that all is locked and safe when the unit’s door is locked. On the opposite side of the table top is more opportunity for display. The glass door can be opened, and a flat painting or drawing be placed inside. Thus, while seating visitors, art is displayed in numerous ways.

Figure 86(a): A step-by-step guide as how to operate the seating unit

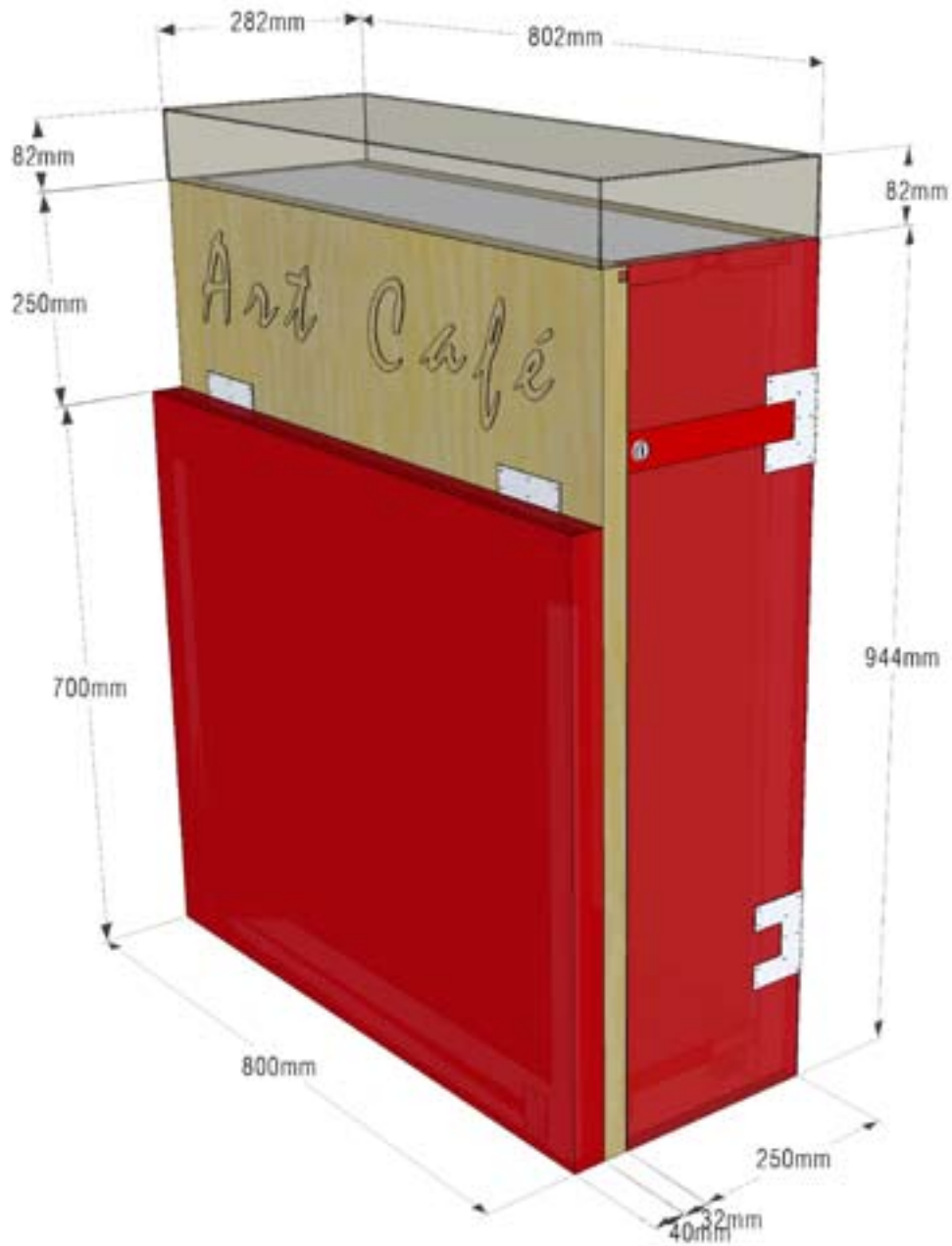


Figure 86(b): Seating Unit dimensions

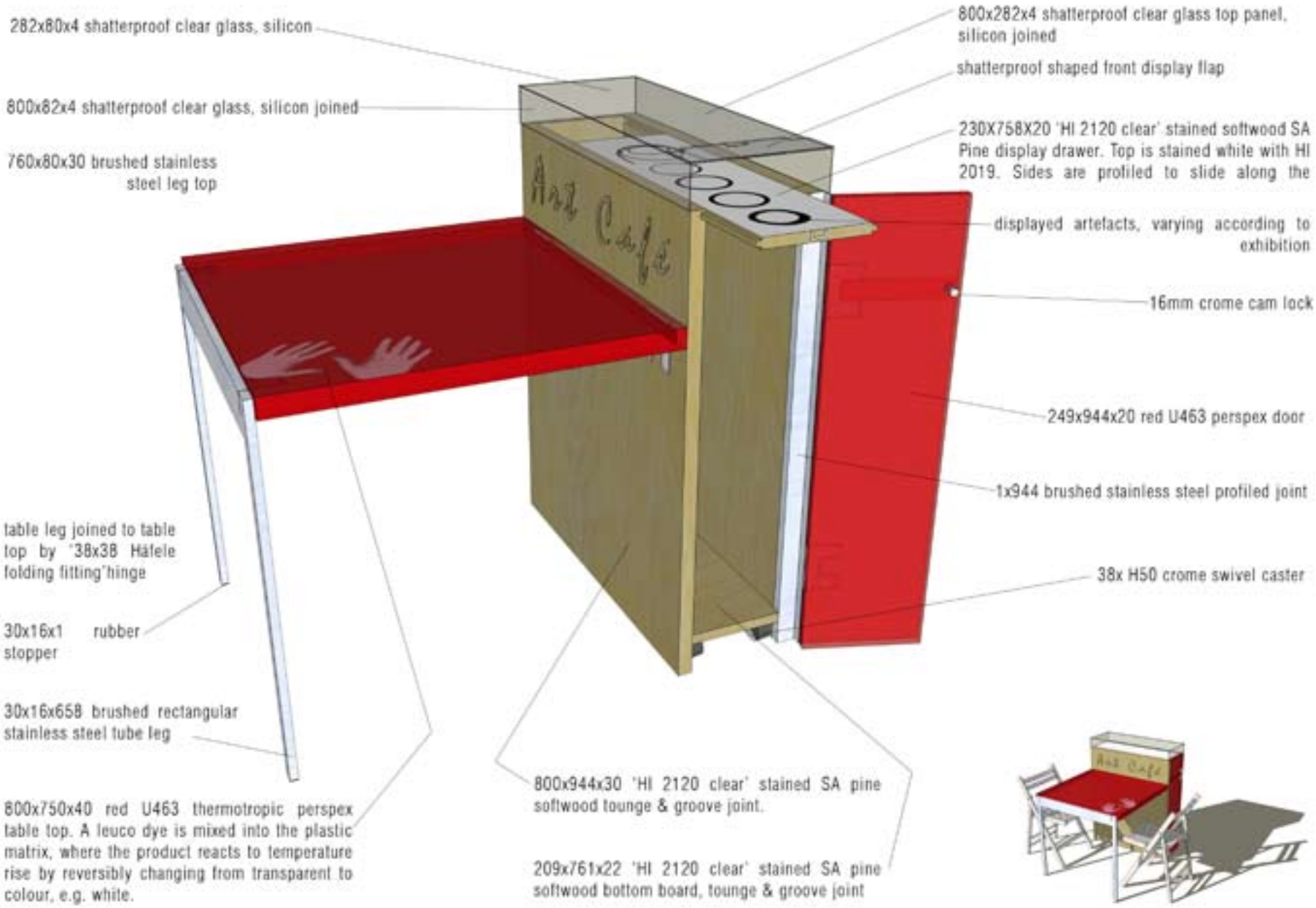
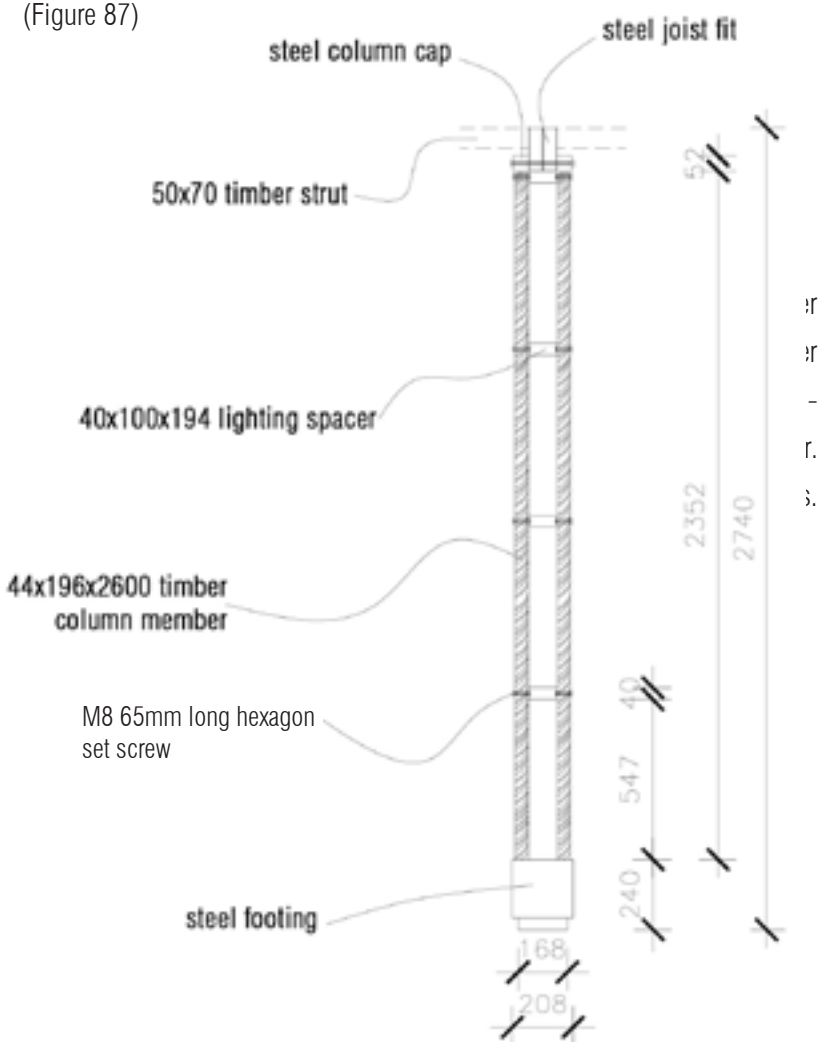


Figure 86(c): Labelled description of the Seating Unit

The column is made up of two vertical timber laths, seperated by a spacer which also keeps the laths in position. The spacer, however, full fills another function, as it consists of a box, in which a LED light strip is placed. The artifacts or café products can be placed in between the laths, on top of the spacer. It will be light be the spacer box above it. Each column will keep four spacers. The columns are one component of the mezzanine system. (Figure 87)



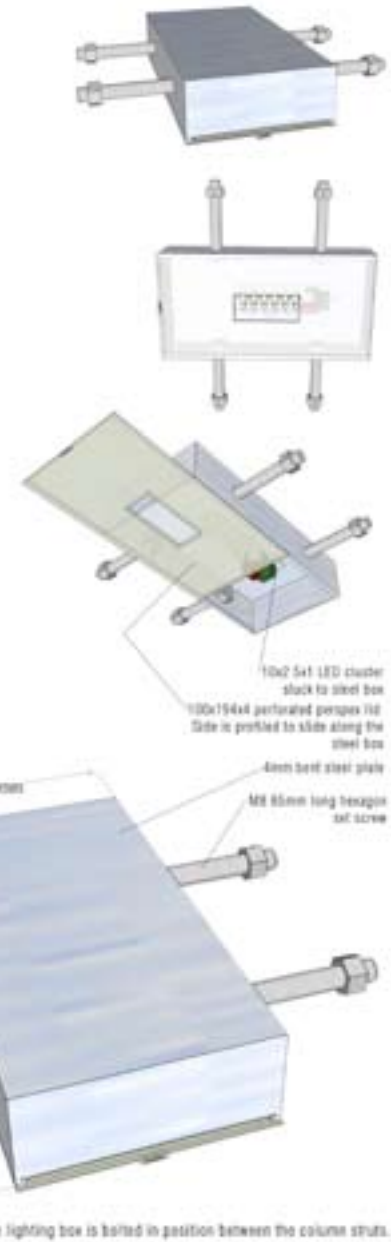
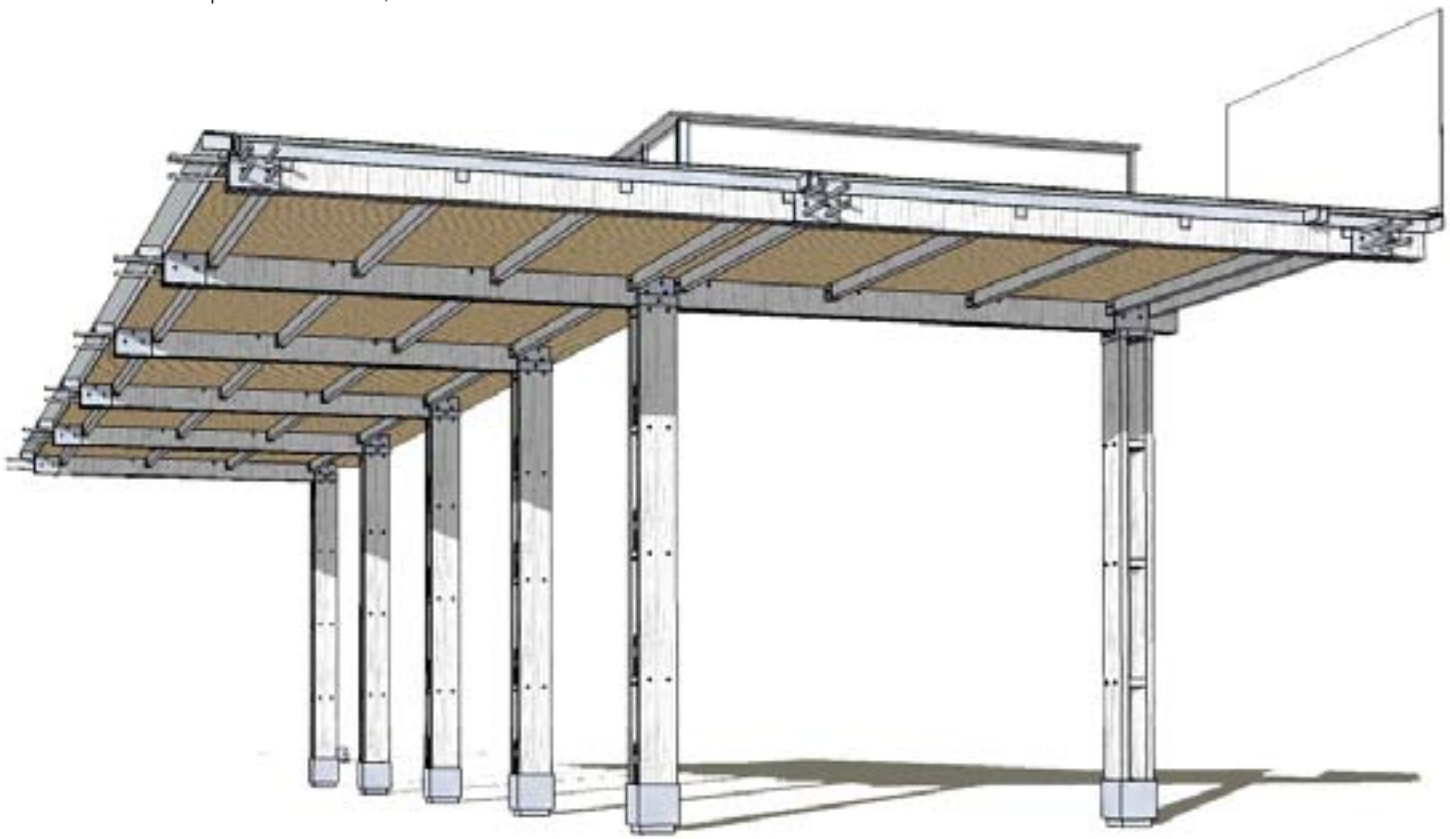


Figure 87(b): Multi-functional column spacer

The aim of the mezzanine system was to have a system, which is easily assembled in a room. Another requirement was for it to stand onto an existing timber floor, which as in this case, is ventilated underneath- i.e. hollow. Each column standing on the existing timber floor should therefore be supported properly from underneath. This is only possible when the columns stand on top of the existing piers. The spacing of the columns therefore follow the grid of the piers. The new mezzanine system responds to the old, already existing system. Brackets slot on top of the columns, into which horizontal laths fit. Cross brack-



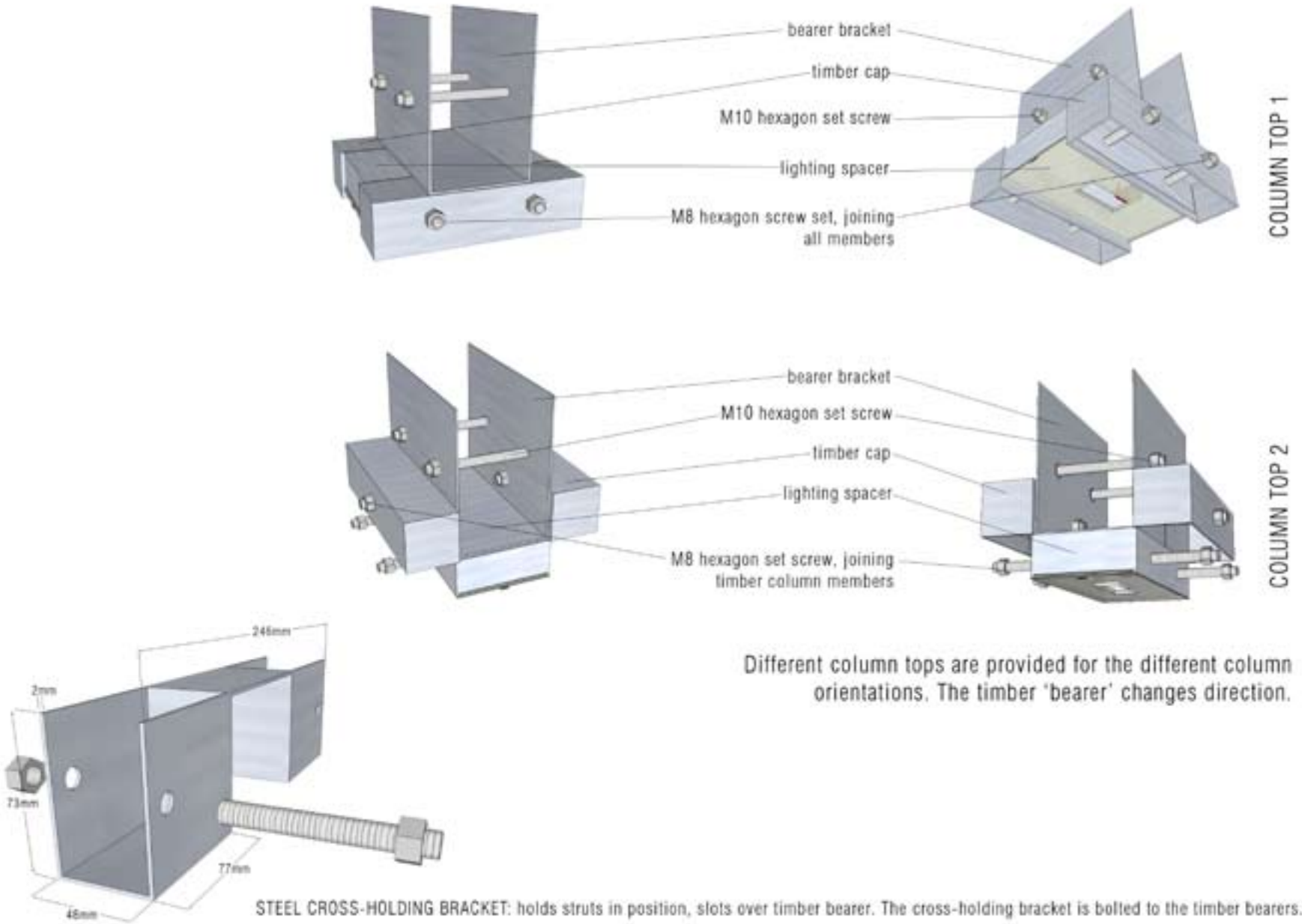


Figure 88(b): Labelled column tops and cross bracket

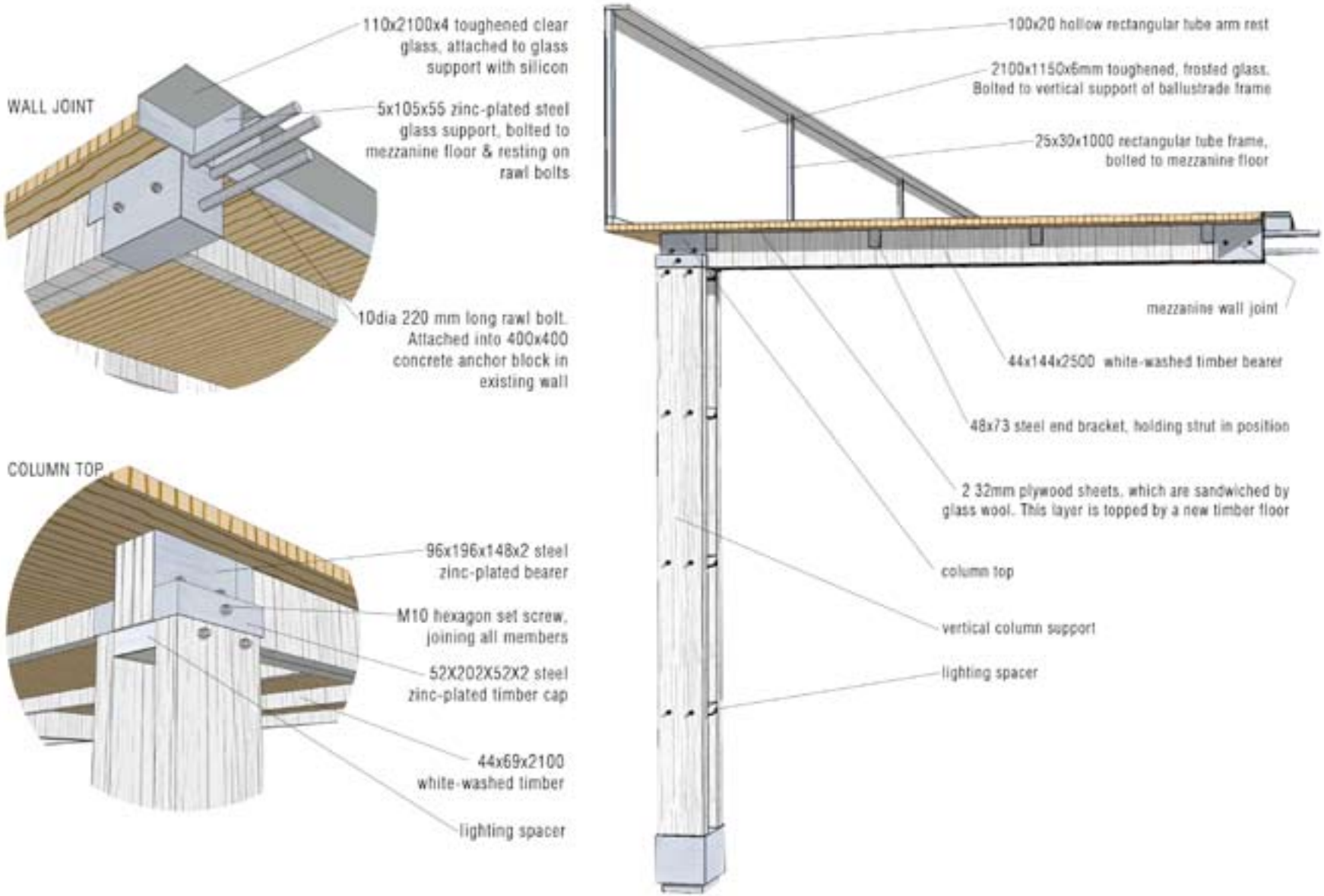


Figure 88(c): Labelled mezzanine system

refigerators etc. The stair-
a light overall weight, so it
89a-d)

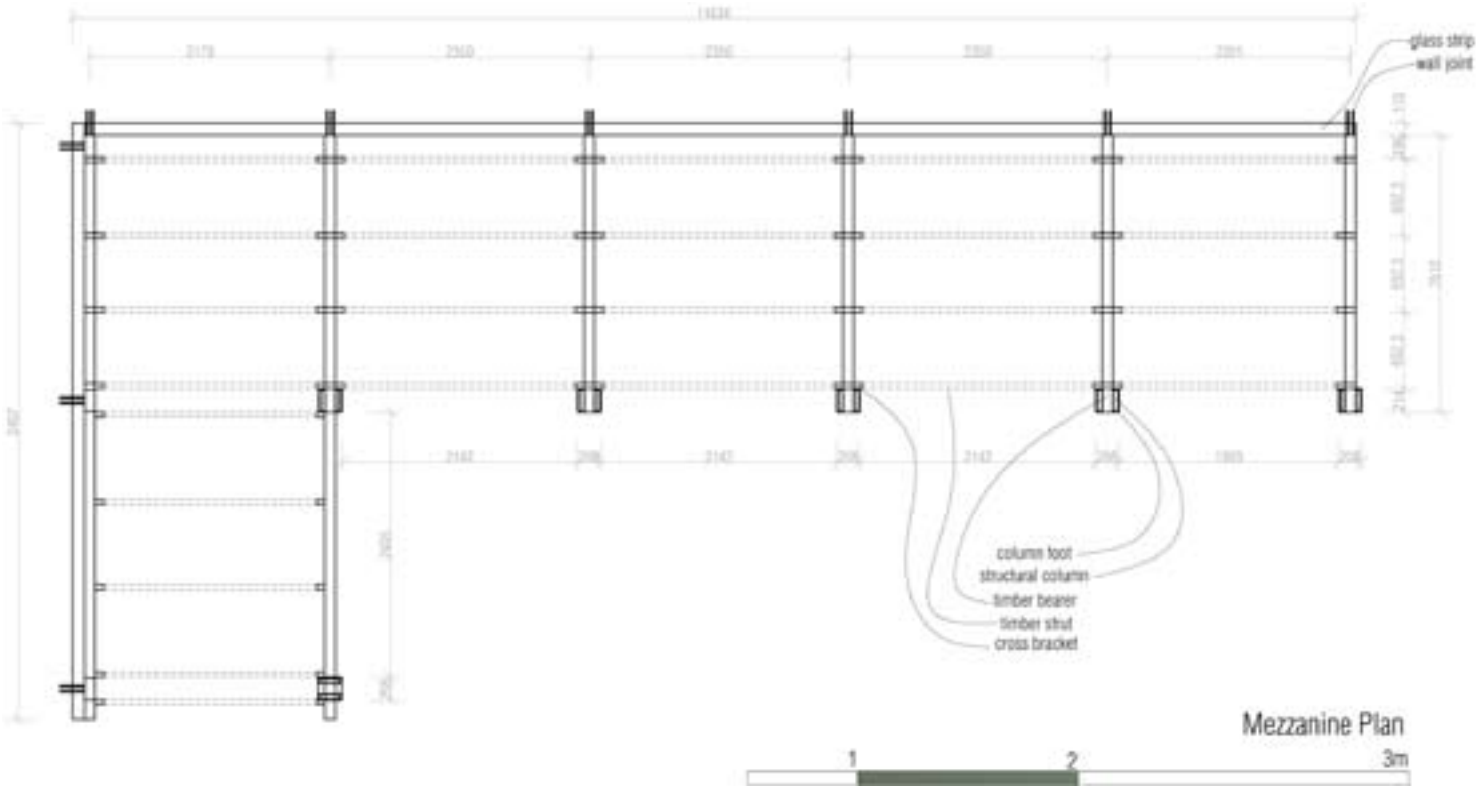
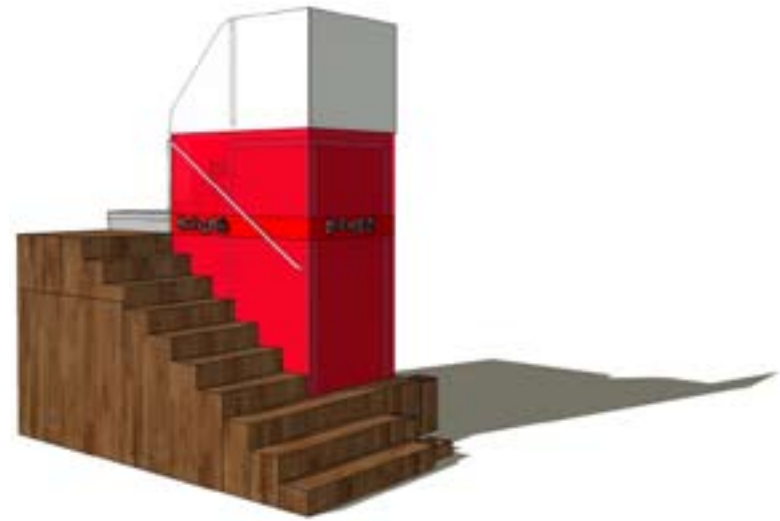


Figure 88(d): Plan of assembled mezzanine system in coffee shop



While the staircase leads up to the mezzanine level, the space below it is used for storage purposes in the café kitchen. The bottom three treads serve as display surface, whilst they also function as drawer space. The act of moving up vertically is emphasised by having the staircase infront of the street window, where the passerby's will see the legs moving almost out of the building. To the kitchen's

Figure 89(b): Back of staircase, showing storage facilities

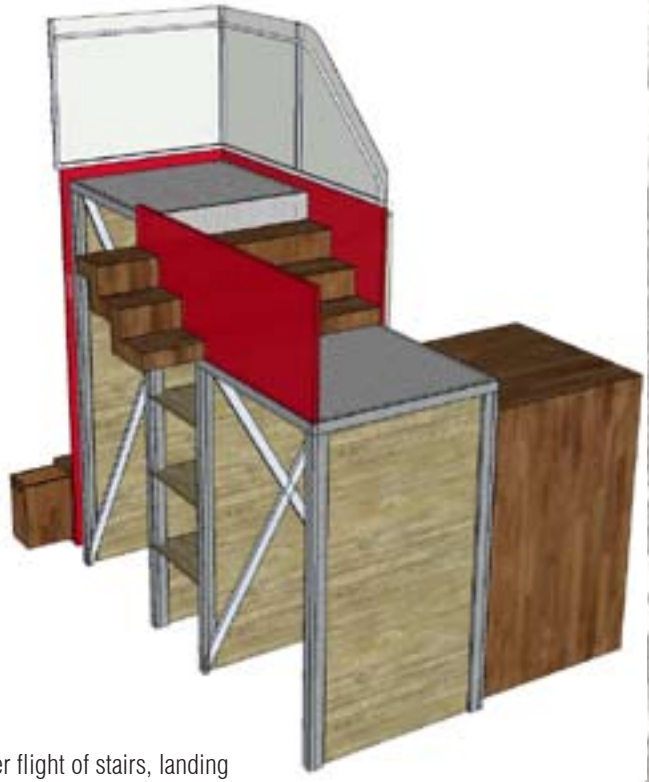


Figure 89(c): Upper flight of stairs, landing

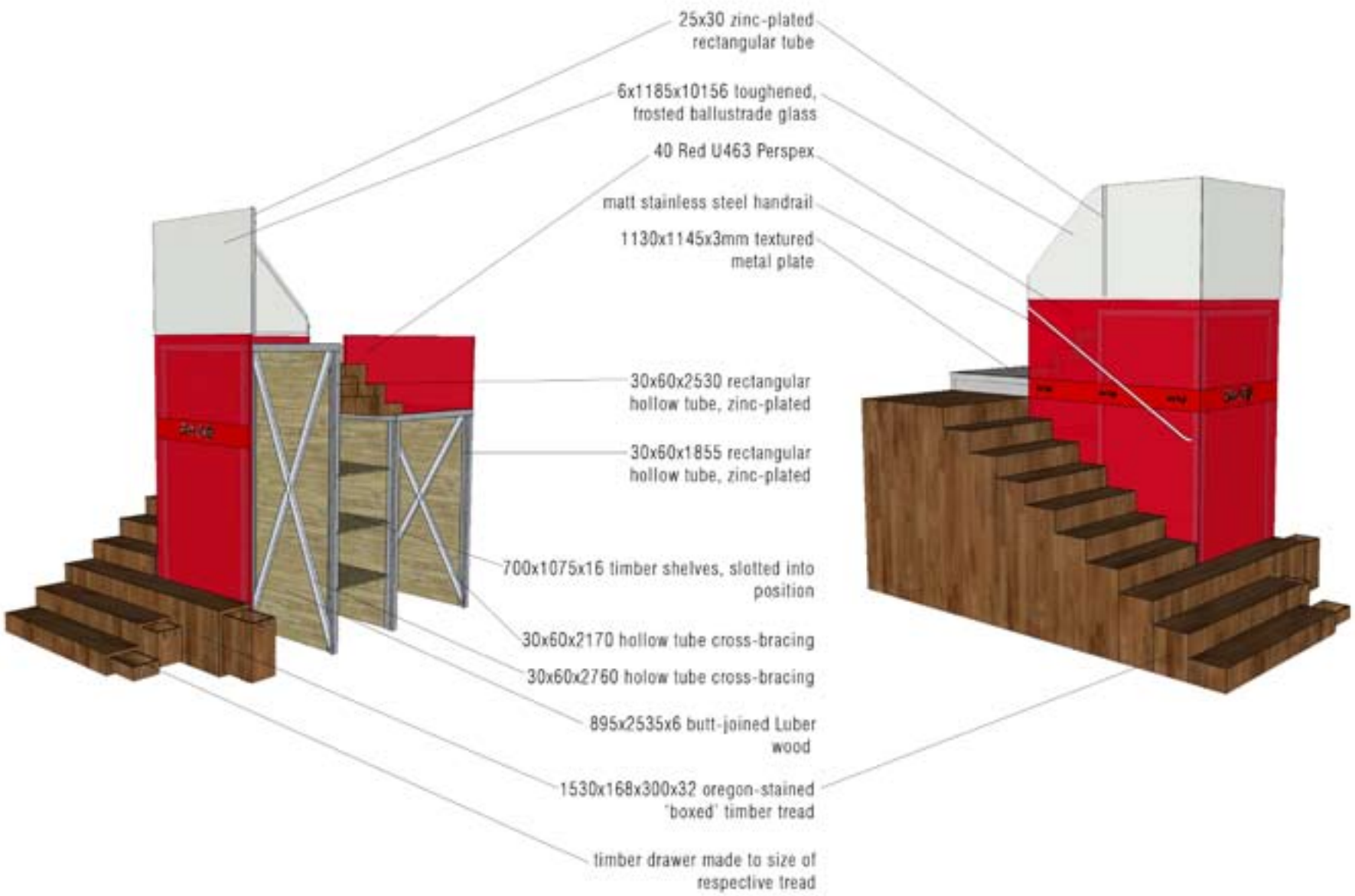


Figure 89(d): Labelled Art Café staircase

The side wings of the southern façade are openend up so as to allow communication from the street side to the interior (Figure 90d). Activities happening inside will lure the passerby in. The façade is opened up by opening up the existing recesses along the exterior wall (Figure 90c). A later added window to the west of the main entrance will be replaced with the new 'recess cover'. As the openings will be on the southern, therefore colder side of the building, glass covers are added which have a warm hue. To emphasise the old and the new time layer, the proposed recess covers will appear to float in position, thereby touching the building only lightly. The recess covers slope down at the top, preventing water collection. The front glass panel slopes inwards, avoiding water to trickle down along it (Figure 90a). Once the water flows off the recess cover, it is absorbed by a gravel bed below it. Ventiilation is allowed for by the air gap between the wall and recess cover (Figure 90b).

Figure 90(c): 'Recess cover' on front facade

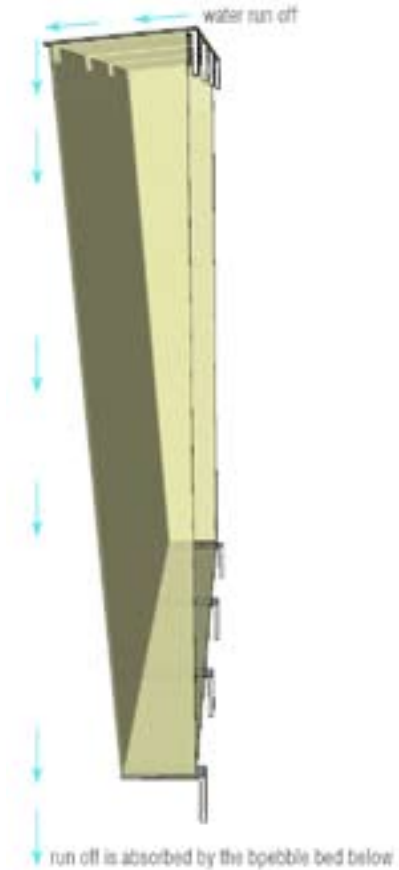


Figure 90(a): Diagram showing water run off of 'recess cover'

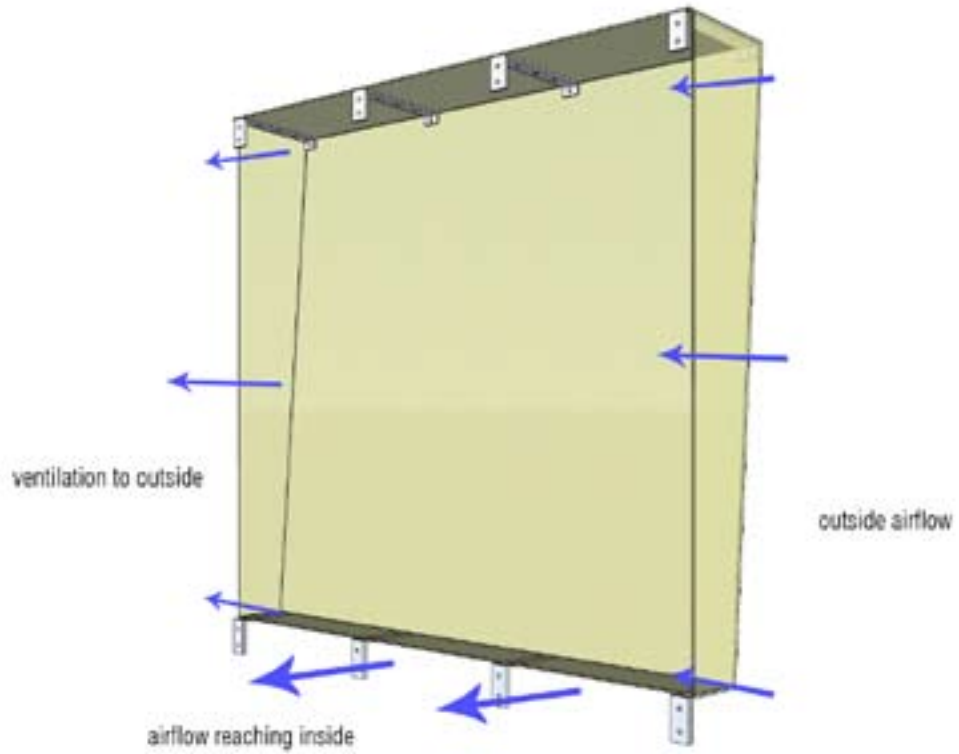


Figure 90(b): Ventilation diagram of 'recess cover'

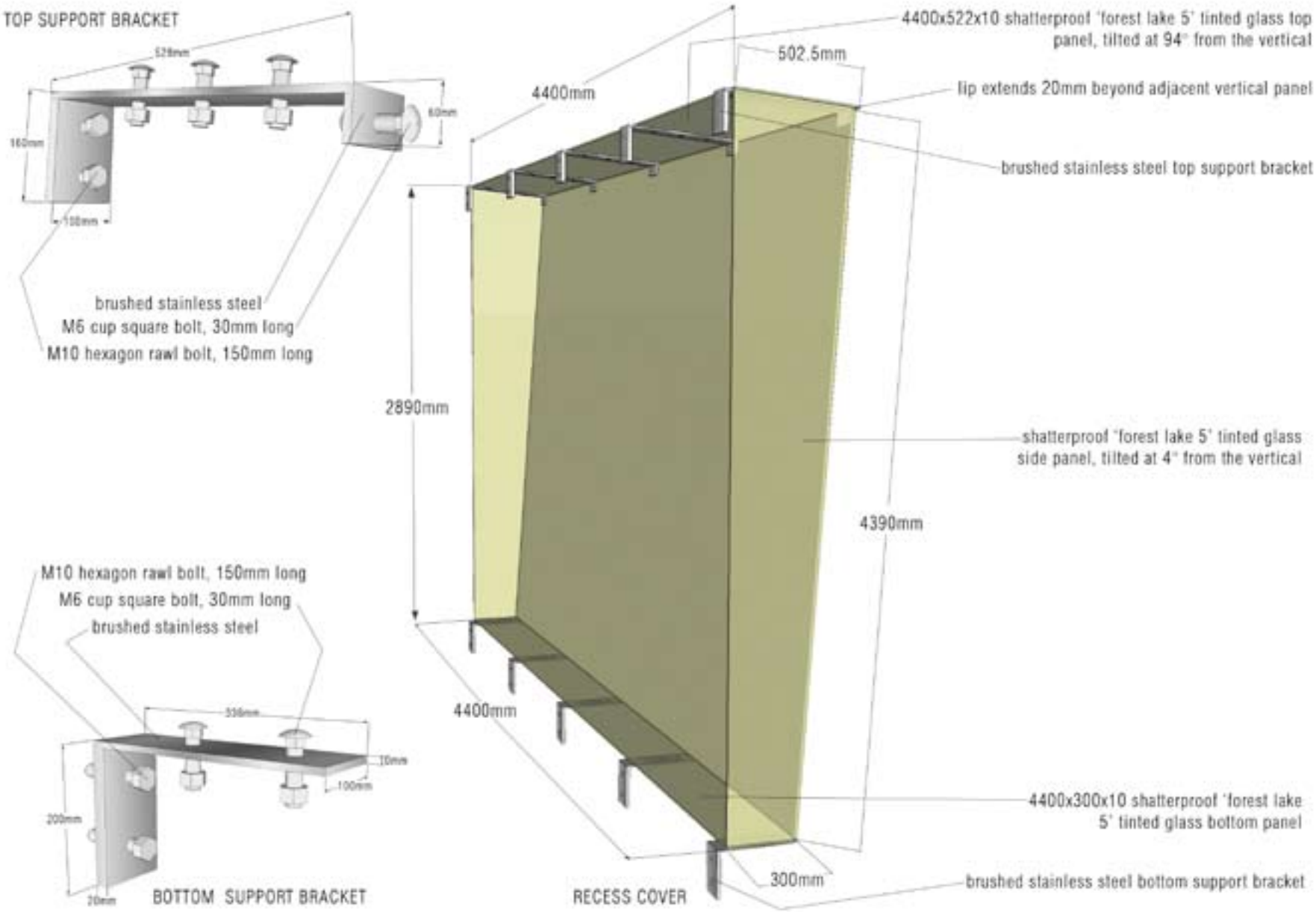


Figure 90(d): Labelling of the 'recess cover'

Figure 90(e): Enhanced communication between the exterior and interior