




The Application of Therapeutic Architecture Concepts in the Proposed Design of a Safe House in Tangerang City

Veronica Jennifer¹, Imaniar Sofia Asharhani¹, Anisza Ratnasari¹

¹Architecture Program, Pradita University, Banten 15810, Indonesia

*Corresponding Author: veronicajennifer001@gmail.com

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ABSTRACT

Violence against women and children is a serious issue in Indonesia, including in South Tangerang City, affecting various layers of society and having negative physical and psychological impacts. Proper and integrated intervention is a duty to protect and rehabilitate the victims. The design of a safe house is proposed as a solution for addressing cases of violence against women and children in Indonesia. This safe house is designed with a therapeutic architecture approach, taking into consideration an environment that supports the recovery process of the victims. The aim of this design is to create a safe, comfortable, and supportive environment for the physical and psychological recovery of the victims. The safe house is designed with a concept that focuses on spatial layout, the selection of soothing colours, appropriate lighting arrangements, and the use of natural elements such as plants and water to create an environment that supports the healing process. Additionally, the safe house is equipped with facilities that support recovery activities, such as counselling rooms, play areas, communal spaces, and living quarters. It is hoped that this safe house will serve as a place of protection for female and child victims of violence, where they can receive support, guidance, and comprehensive recovery. The safe house is expected to provide a real solution for addressing cases of violence and offer protection and opportunities for victims to start a better life anew.

Keyword: Therapeutic, Architecture, Safe House

ABSTRAK

Kekerasan terhadap perempuan dan anak merupakan masalah serius di Indonesia, termasuk di Kota Tangerang Selatan, yang mempengaruhi berbagai lapisan masyarakat dan memiliki dampak fisik serta psikologis yang negatif. Intervensi yang tepat dan terintegrasi merupakan kewajiban untuk melindungi dan merehabilitasi para korban. Desain rumah aman diusulkan sebagai solusi untuk menangani kasus kekerasan terhadap perempuan dan anak di Indonesia. Rumah aman ini dirancang dengan pendekatan arsitektur terapeutik, dengan mempertimbangkan lingkungan yang mendukung proses pemulihan korban. Tujuan dari desain ini adalah menciptakan lingkungan yang aman, nyaman, dan mendukung pemulihan fisik serta psikologis para korban. Rumah aman ini dirancang dengan konsep yang berfokus pada tata ruang, pemilihan warna yang menenangkan, pengaturan pencahayaan yang sesuai, serta penggunaan elemen alami seperti tanaman dan air untuk menciptakan lingkungan yang mendukung proses penyembuhan. Selain itu, rumah aman ini dilengkapi dengan fasilitas yang mendukung kegiatan pemulihan, seperti ruang konseling, area bermain, ruang komunal, dan tempat tinggal.

Diharapkan rumah aman ini akan berfungsi sebagai tempat perlindungan bagi korban kekerasan perempuan dan anak, di mana mereka dapat menerima dukungan, bimbingan, dan pemulihan secara komprehensif. Rumah aman ini diharapkan dapat memberikan solusi nyata untuk menangani kasus kekerasan serta menawarkan perlindungan dan kesempatan bagi para korban untuk memulai hidup yang lebih baik.

Keyword: Maximum, Five, Word, Key, Important



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1. Introduction

Violence against women and children is a serious issue that has garnered attention in Indonesia, especially in South Tangerang City. Despite efforts to address this problem, the incidence of violence remains quite high and concerning. According to SIMFONI PPA, there were 3,117 victims recorded from 2016 to 2021. As reported by the Women's Health Foundation in 2021, this violence not only harms individual victims but also disrupts social order and human values. This phenomenon involves various layers of society, from urban to rural areas, and spans different levels of education and social backgrounds.

Violence against women and children can occur in various forms, including physical, sexual, psychological, and economic violence. Its impact is not limited to the physical aspect but also carries serious psychological consequences, such as trauma, mental disorders, and depression. Therefore, addressing cases of violence against women and children is an urgent and crucial task. Therefore, addressing cases of violence against women and children is an urgent and essential task.

A safe house is a facility or shelter specifically designed to provide a safe, comfortable, and supportive environment for victims of violence, especially women and children, who require protection from domestic violence or other threats. This safe house offers a place for victims to receive physical and psychological protection, support, and recovery.

In a safe house, several activities are commonly undertaken to support the protection and recovery of victims of violence against women and children. These activities include: counselling and emotional support services; education and training programs; therapy and recovery activities; providing information and legal guidance; recreational and social activities; health education; medical services; social support services; education on violence prevention; financial recovery and economic empowerment programs; providing physical protection and security.

The design of a safe house that emphasizes a therapeutic architecture approach is expected to provide a tangible solution in addressing cases of violence against women and children in South Tangerang City. It aims to offer protection, empowerment, and opportunities for victims to start a better and dignified life. Therapeutic architecture is an approach in architectural design that aims to create a physical environment that supports the physical and mental healing of individuals. This approach focuses on designing spaces and healthcare facilities that are comfortable, tranquil, and calming for patients or individuals experiencing physical or mental health disorders. Therapeutic architecture seeks to create spaces that reduce stress, facilitate the healing process, and improve the quality of life for patients. Some principles to be considered in therapeutic architecture design include natural lighting, comfortable temperature and humidity control, the use of colors and natural elements, and the creation of quiet and separate private spaces for patients.

2. Method

The research is conducted to gain a comprehensive understanding of addressing cases of violence against women and children through the design of a safe house using a therapeutic architecture approach. This research employs an approach that focuses on seeking supporting theories and studying precedent buildings with similar functions and approaches to formulate an appropriate and effective design concept.

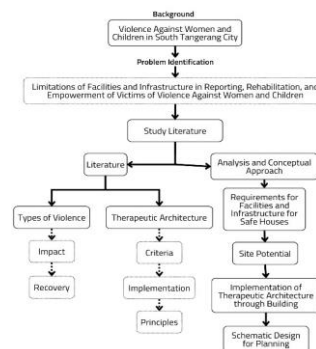


Figure 1. Writing Systematics

Source: Jennifer, 2023

3. Discussion

2.1 Findings and Discussion

In the results and discussion section, the focus is on deliberating the outcomes of the design that have been developed in accordance with the background of this design endeavour. The findings and discussions pertaining to the design encompass site analysis, user analysis, design concepts and strategies, functional zoning and requirements, mass transformation, and design development.

2.2 Design Programming

2.2.1 Site Analysis

This design is conducted in the province of Banten, specifically in South Tangerang City. This city is the second-largest city in the Banten Province after Tangerang City. Currently, South Tangerang City is undergoing development as a residential, commercial, and service area. The selection of the site location was considered due to its proximity to government facilities for addressing violence against women and children, as well as its distance from major roads.

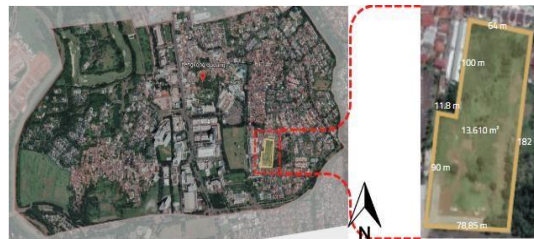


Figure 2. Site Location

Source: Google Earth, Personal Documentation, 2023

The land has a total area of 13,610 square meters and is located on Pahlawan Seribu Street, Serpong District, Lengkong Gudang Village, South Tangerang City, Banten 15321. The Lengkong Gudang area is densely populated with residential and commercial zones, and it has very few green spaces. The land is situated amidst residential areas and private offices and is far from the main road, resulting in relatively low noise levels on the site due to the limited presence of private and public vehicles near the area. Another factor is that area does not have roads connecting to residential areas or offices; there is only access in and out of area. Despite the low noise levels on the land, a noise buffer is still placed to mitigate potential noise disturbances.

The eastern direction serves as a significant source of sunlight, resulting in the need for sun shading on buildings facing east to filter incoming light. The high temperature in the vicinity of the land makes it extremely hot, ranging from 27° to 35°C, exacerbated by poor air quality, which intensifies the perception of heat.

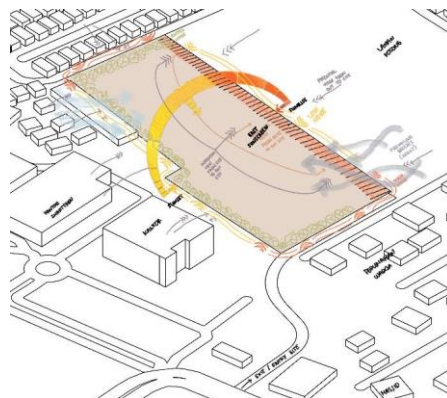


Figure 3. Analysis Site

Source: Jennifer, 2023

In the eastern direction, the site is adjacent to vacant land, and during the morning, sunlight is quite intense and enters the site abundantly. Therefore, the use of a second façade that can filter incoming light into the building is necessary. In addition to artificial ventilation, natural ventilation is also required for effective air exchange, facilitated by gardens and plants outside the building.

The site's location in an office and residential area limits outward views from within the site. This necessitates the creation of positive views within the building. Conversely, views from outside the site are limited to the physical exterior of the building. Although there is active local road traffic around the site (residential road to the north), noise levels remain low, and the site's surroundings offer a fairly tranquil acoustic environment. Nevertheless, creating noise buffers remains a crucial element in filtering out potential disruptive noises that may arise at any time.

2.2.2 User Analysis

Based on user analysis, the spatial requirements for users in the safe house can be determined by user types, which include patients, visitors, doctors, employees, and service personnel. Subsequently, for patients, the determination is based on their age group, namely 1-5 years (infants), 5-14 years (children), 15-24 years (teenagers), and 25-34 years (adults).

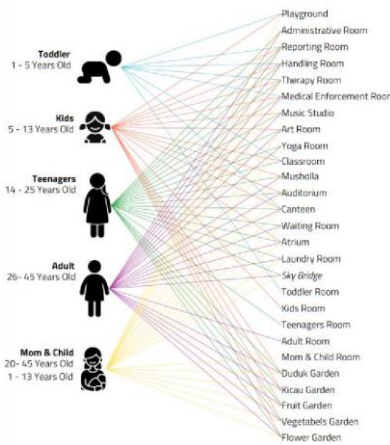


Figure 4. User Analysis
Source: Jennifer, 2023

2.2.3 Concepts and Design Strategies

Therapeutic architecture focuses on creating a physical environment that supports the healing of individual for experiencing health disorders, with several design strategies that should be implemented.



Figure 5. Principles of Therapeutic Architecture
Source: Jennifer, 2023

In therapeutic architecture, optimizing the availability of easily accessible, wellorganized, and safe green spaces free from hazardous materials or plants for visitors to enjoy is essential. For examples, using a stepping stones and gates. Additionally, planting dense vegetation to avoid external noise and create pleasant acoustic environments with more positive melodies is important. Utilizing natural colors and textures of natural stone as finishing materials on building walls, as well as employing wood materials for ceiling finishing, are also recommended practices.

Utilizing glass roofs and large windows surrounding the building to allow natural light to penetrate its interior. Establishing clear spatial zoning to separate main and ancillary spaces while distinguishing between private, public, and semi-public areas to provide occupants with freedom within their private areas. Offering spacious and unobstructed circulation areas for all occupants, including those with limited mobility, to ensure easy and comfortable access to the building for all. Providing spaces for art and entertainment that serve as facilities to enhance the well-being of occupants. Designing with furniture that aligns with specific needs.

2.2.4 Zoning

The bubble diagram analysis of the interconnection between spaces with different functions will differentiate the administrative area from the patient residence, located separately but connected through a sky bridge and pedestrian pathways serving as transitional areas.

This analysis also demonstrates the division of space into public, semi-public, and private areas, further categorized into two types: main spaces and support spaces. From this analysis, it is evident that the majority of rooms constitute private main areas accessible only to patients, staff, and authorized individuals.

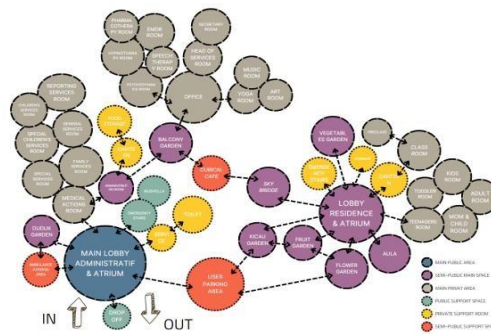


Figure 6. Bubble Diagram
Source: Jennifer, 2023

Based on the analysis of the bubble diagram conducted, the zoning plan can be implemented on the site to obtain facility zoning and user and visitor circulation zones within the building.

From the site zoning, a vertical zoning plan can be derived to determine the number of floors and area requirements.

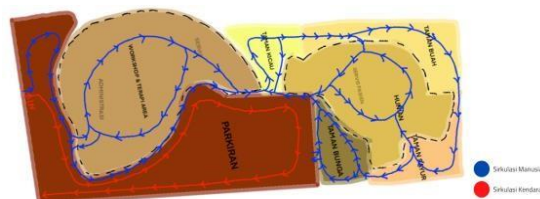


Figure 7. Site Zoning Plan
Source: Jennifer, 2023

In the vertical zoning, it reveals the spatial composition of each floor. In the administrative building, there are two floors, with the first floor serving as the administrative area, and the second floor as the therapy and workshop area. In the second building, which is the residential building, the first floor is dedicated to communal patient areas, the second floor is for infant and maternal care, and the third floor provides housing

for adolescents and adults.

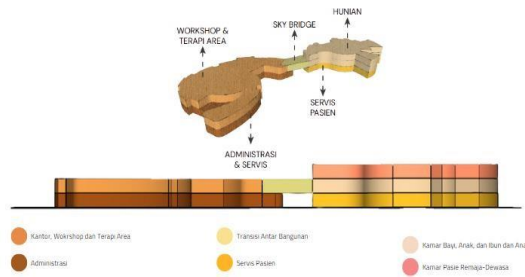


Figure 8. Vertical Zoning Plan
Source: Jennifer, 2023

2.2.6 Form Composition

The architectural form composition draws inspiration from the concept of a grasping hand and the Chronodex. The building design symbolically represents a pair of hands ready to grasp, signifying a warm welcome, strength, and protection for the victims. This concept will be applied to the first building mass, serving as a therapy and administration area for the victims.

Additionally, the Chronodex form represents a visual representation of time in the shape of a circle divided into multiple sectors, reflecting the hours of the day.

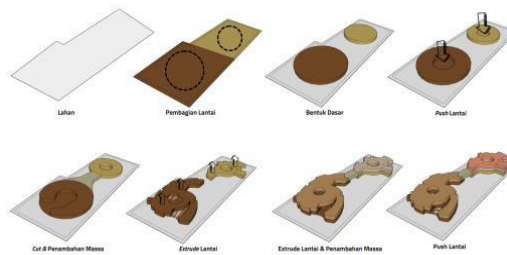


Figure 9. Vertical Zoning Plan
Source: Jennifer, 2023

The elongated site conditions will be divided into two zones, Private and SemiPrivate, according to requirements. The fundamental building form consists of two circles, with the central part of the circle pushed to serve as an atrium and skylight space. The response to the Chronodex metaphor concept involves shifting and tilting building masses, and incorporating cutting into the building masses to form a grasping pattern, inspired by the concept of a grasping hand. An additional second floor with a typical mass shape is added. The first building mass functions as an administrative and reporting service building, while the second building mass serves as housing for infants, children, and mothers & children. A third floor is added to the second mass with a typical shape and serves as housing. At the bottom of the sky bridge, a space is allocated for the transitional area on the ground floor.

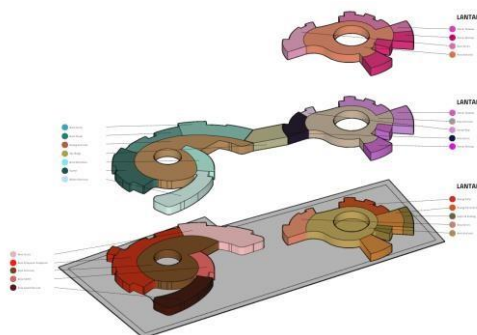


Figure 10. Axonometric Building Function Zoning

Source: Jennifer, 2023

From the diagram analysis conducted, the zoning plan can be implemented on the site to establish facility zoning and user and visitor circulation zones within the building. This zoning creates important or primary spaces within the building to support the psychological and physical healing of individuals.

2.2.7 Design Development

Based on the literature study conducted, the application of therapeutic architecture principles in the design model of a safe house building is as follows:

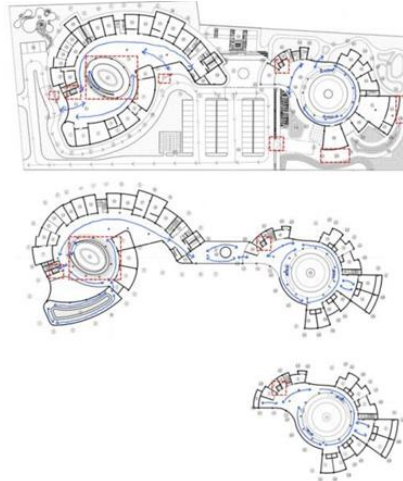


Figure 11. Floor Circulation Plan – Floor 1, Floor 2, and Floor 3

Source: Jennifer, 2023

In achieving therapeutic architecture, the building responds to the principles of flexibility and accessibility by incorporating several ramps at the drop-off area and gardens. Additionally, the building provides patient or visitor lifts at two points, facilitating ease of transition between rooms or floors for wheelchair-bound patients.

Each design aimed at achieving therapeutic architecture pays attention to lighting, furniture placement, room color, and material texture in every area.



Figure 12. Art Room

Source: Jennifer, 2023

In support of therapeutic architecture, which provides areas for art and entertainment as facilities to enhance the well-being of occupants, the design facilitates patients with high well-being by including a workshop space for art and entertainment. The facilities provided include painting rooms, music rooms, yoga rooms, communal balconies, green gardens, classrooms, and an atrium.



Figure 13. Mother and Child Room
Source: Jennifer, 2023

Each patient room design prioritizes ample natural lighting, with large windows and access to natural views to create a pleasant and calming atmosphere for patients. The use of a tranquil and soft color palette, such as pastel and neutral colors, aids in establishing a relaxed ambiance.



Figure 14. Mother and Child Room
Source: Jennifer, 2023

The building's lighting is maximized through the window openings, with the uppermost windows being operable to facilitate fresh air exchange. These windows are implemented in several rooms that require abundant natural light, such as the atrium garden area to support optimal plant photosynthesis. In the atrium area, in addition to large windows, skylights are utilized to allow maximum natural light penetration.

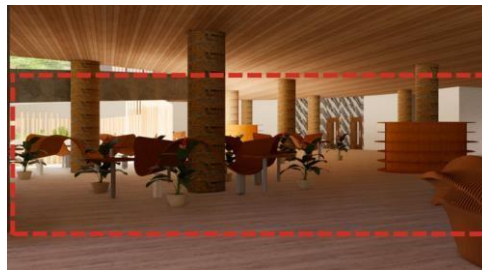


Figure 14. Mother and Child Room
Source: Jennifer, 2023

In therapeutic architecture design, waiting rooms can be designed with calming elements such as walls featuring natural landscapes, green plants, and the use of soothing, soft colors. Additionally, waiting areas can be designed with good air circulation and natural lighting to create a comfortable atmosphere for both patients and visitors.

In addition, to indoor spaces, one of the principles of therapeutic architecture is to integrate humans with green spaces that can be directly accessed by building users. The implementation of green spaces in the area includes sitting gardens, bird gardens, transition gardens, flower gardens, vegetable gardens, fruit gardens, and atrium gardens. These gardens are not only presented for the beautification of the area but also serve as a support for the principles of therapeutic architecture.



Figure 15. Re-Covery Center
Source: Jennifer, 2023

The Re-Covery Center is a safe house designed to create essential or primary spaces within the building as a support for the psychological and physical healing of individuals. It achieves this by creating soothing spaces with calming elements such as walls featuring natural landscapes, green plants, and the use of soft colors. "Therapeutic architecture design in a rehabilitation center can encompass both indoor and outdoor facilities that support physical therapy, including therapy pools, exercise rooms, and healing gardens.



Figure 17. Location of Ground Floor Garden
Source: Jennifer, 2023

On the first floor, there are eight garden designs, two of which are located in the interior, while the other six garden designs are situated in the exterior.

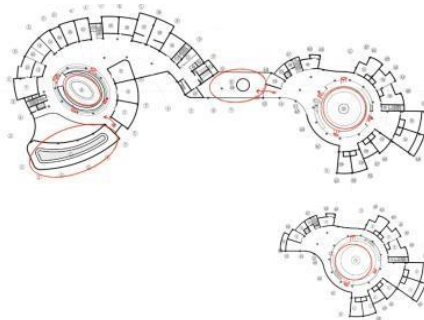


Figure 18. Location of Gardens on Second Floor and Third Floor
Source: Jennifer, 2023

On the second floor, there are two exterior gardens and an atrium garden that can be appreciated visually and aromatically. Additionally, on the third floor, there is an atrium garden that provides visual and aromatic enjoyment. Below are the designs for the exterior gardens on the first and second floors.



Figure 19. Fruit Garden
Source: Jennifer, 2023

Natural sounds can trigger relaxation responses in the nervous system and help reduce anxiety. Several studies have revealed that listening to natural sounds, such as flowing water, birdsong, or the rustling of leaves and tree branches, can have a relaxing effect and reduce stress.

There is a fruit garden, which is a private area designated for patients with improved well-being, but it can be visually and acoustically appreciated by patients with lower well-being levels. This also serves as a noise buffer by planting dense vegetation to mitigate external noise and create a pleasant acoustic environment through the rustling of fruit tree leaves.

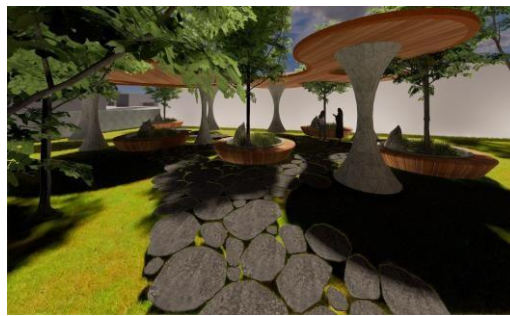


Figure 20. Sitting Garden
Source: Jennifer, 2023

In addition to fruit trees, planting lush trees like Ketapang Kencana and other vegetation outside the building can help mitigate noise inside the structure. Ketapang Kencana and bamboo, besides providing shade and improving air quality, also serve as excellent natural acoustics. Several studies have shown that natural sounds, including the rustling of trees, can have a calming effect and help alleviate stress. Therefore, there are several outdoor and indoor garden designs that incorporate Ketapang Kencana trees, one of which is the sitting garden.



Figure 21. Bird Garden
Source: Jennifer, 2023

The bird garden is a social area designed for the families of patients and patients themselves during visits. This garden utilizes birds as an acoustic medium, specifically the chirping of birds. This can trigger

relaxation responses in the nervous system and help divert attention from oppressive thoughts (Lee, J., & Kim, J., 2019). The types of birds maintained in this garden due to their beautiful and melodious songs include goldfinches, canaries, and sparrows.

The last equally important principle, both for interior and exterior spaces, is the selection of materials and colors. This is crucial for creating a soothing and pleasant atmosphere that promotes the well-being of building occupants. Here are the types of materials and colors implemented both inside and outside the building.

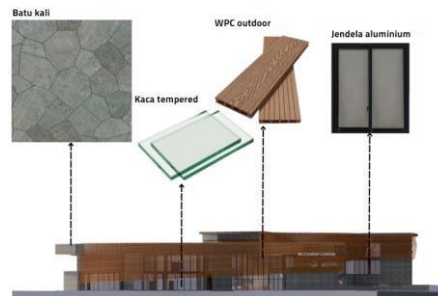


Figure 22. Exterior Space Material
Source: Jennifer, 2023

The use of river rock walls for outdoor spaces has several potential benefits, particularly in terms of aesthetics and durability. The rough texture and varied colors of river rock can provide a unique character and aesthetics, adding visual value and appeal to the building. River rock is a durable material that can withstand extreme weather conditions.

In the facade section, the material used is WPC (Wood Plastic Composite), which is a modern alternative to wood. WPC consists of 50% plastic fibers and 50% wood powder, providing a combination of strength and aesthetics that resemble wood while retaining the durability and polymer/plastic advantage.

The use of aluminium for window and door frames offers various advantages. Aluminium is resistant to corrosion and rust, making aluminium window and door frames durable with a long lifespan. Tempered glass, also known as heat-strengthened glass or thermal toughened glass, has several benefits that make it popular in building and industrial applications. Tempered glass is more resistant to impact and pressure compared to regular glass.



Figure 23. Interior Space Material
Source: Jennifer, 2023

The choice of white paint as the room color has several common reasons that are often related to aesthetics, visual impression, and functionality. White is often associated with simplicity and cleanliness. The use of white paint can create a calm and peaceful atmosphere indoors. White paint can give the impression of a larger and brighter room. White has the ability to reflect light effectively, thus helping to distribute natural light indoors and create a brighter atmosphere.

4. Conclusion

Violence against women and children in Indonesia is a serious issue that encompasses various forms of violence, including physical, sexual, and psychological, both within households and towards children. Although it remains a deep concern, efforts to address this problem are ongoing. The design of a safe house in South Tangerang City is one such effort to provide services, rehabilitation, and empowerment. The main facilities in this design include reporting services, various therapies such as eye movement desensitization and reprocessing, pharmacotherapy, psychodynamic therapy, hypnotherapy, speech therapy, and child counselling, as well as playrooms, art rooms, music rooms, and yoga rooms. There are also housing facilities for different patient groups.

Violence against women and children in Indonesia is a serious issue that encompasses various forms of violence, including physical, sexual, and psychological, both within households and towards children. Although it remains a deep concern, efforts to address this problem are ongoing. The design of a safe house in South Tangerang City is one such effort to provide services, rehabilitation, and empowerment. The main facilities in this design include reporting services, various therapies such as eye movement desensitization and reprocessing, pharmacotherapy, psychodynamic therapy, hypnotherapy, speech therapy, and child counselling, as well as playrooms, art rooms, music rooms, and yoga rooms. There are also housing facilities for different patient groups.

5. Acknowledgements

In this journal, the author wishes to express sincere appreciation and gratitude to all parties who have contributed to and supported the writing and design of this safe house. The author hopes that the results of this research can make a positive contribution to efforts to address cases of violence against women and children, as well as provide guidance in the design of safe houses that support the recovery of victims. All the support and contributions provided have been invaluable to the success of this research. Thank you for all your assistance and cooperation.

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