

## Training on Rehabilitation of Rasuna Said's House as a Cultural Heritage Building, in Agam District, West Sumatera

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### Abstract

*A sizable improvement was made in 2013 with the funding source coming from Garuda Indonesia's Corporate Social Responsibility (CSR). At that time the repairs carried out included strengthening the second floor by coating multiplex with a thickness of 12 mm, painting, repairing windows and doors on the second floor. Massive changes were made on the first floor, namely the demolition of all the walls of the rooms, dismantling the wooden floors and replacing them with ceramic floors. The rehabilitation training at this PKM was observing Rasuna said's house which significantly explained that the main building or the middle building on the first floor had two windows, while the second floor had three windows. The function of this window is to enter sunlight as room lighting from sunlight during the day, besides that the window also functions as a regulation of air circulation from the right side. The floor plan of Rasuna Said's house is rectangular, extending towards the back with a length of 26 m, a width of 9.9 m. The floor plan of the building is above the ground with a slope towards the back of approximately 2 m, from the road to the boundary of the rear building (kitchen building). The building plan consists of several rooms, namely; reception room/porch, living/main room, back room, as well as the front yard and fence. The reception room is the front room, on the left side of the foyer there is one room. Furthermore, the main room is positioned in the middle, from this room you can continue to the second floor and to the back room/kitchen.*

### Keywords

training on rehabilitation;  
Rasuna Said House; restoration



## I. Introduction

West Sumatra has many beautiful cultural heritage buildings and must be preserved. This cultural heritage is an invaluable wealth of the nation, and the most important thing is how to understand history, science and culture in maintaining the assets of this nation's wealth. Cultural Conservation Buildings need to be protected and preserved in order to foster awareness of national identity and national interests. Efforts to preserve the Cultural Conservation to date continue to be carried out, both by the government and by the wider community. In the Law of the Republic of Indonesia number 11 of 2010 in CHAPTER I article 1 paragraph 1, it is explained that Cultural Conservation is a cultural heritage that is material in the form of Cultural Conservation Objects, Cultural Conservation Buildings,

Cultural Conservation Structures, Cultural Conservation Sites and Cultural Conservation Areas on land and / or in water whose existence needs to be preserved because it has important values for history, science, education, religion and / or culture through the Determination Process (Ministry of Education and Culture, 2011).

Rasuna Said's house is one of the Cultural Heritage Buildings located in Agam Regency, West Sumatra Province. Historically this building was once the home of Hj. Rasuna Said, a National Hero who is famous for being persistent in fighting for the independence of the Indonesian people during the Dutch colonial period. To honor his struggle and preserve the history of this house building, in 2017 the government has designated Rasuna Said's house as a National Rank Cultural Conservation by Decree of the Minister of Education and Culture Number 370/M/2017 (Ministry of Education and Culture, 2017).

Preservation of Rasuna Said's house is still not optimal, it can be seen that the current condition of the building has a lot of damage, both on the roof, roof wood frame, as well as building walls and others. According to information and facts in the field, the renovation of Rasuna Said's house had been carried out in 2013 by PT. Garuda Indonesia. There are several parts that have been repaired and the most notable change made is replacing the second floor covering. Likewise, the first floor is very far from its original condition. In accordance with the Law on Cultural Conservation, the preservation of the Rasuna Said House building needs to be re-examined to maintain the condition of this building because it has become a Cultural Conservation.

Currently the building is not functioning optimally and is also very lacking in terms of maintenance. Concerns arise, if the building of Rasuna Said's house is left alone, it can be believed that this building will be damaged and run out. Therefore, the researcher considers it necessary to carry out an Analysis of the Restoration of the Rasuna Said House which has been used as a Cultural Heritage Building. The results of this study can be used as a guide in repairing and preserving Rasuna Said's house.

This house has undergone several changes in function, at first it was the residence of the Rasuna Said family, after that it was not occupied because most of the heirs' families did not live in the Maninjau area. It is not known for certain since when this house has not been occupied, it is only known that after the house was vacant, then the building was used by the surrounding community as a public facility with the permission of the heirs. Utilization on the first floor as a prayer room which is named "Mushalla An-Nur HM Said" the name of the prayer room is the name of Rasuna Said's father, namely Mohammad Said. The prayer room is used by the local community for congregational prayers Subuh, Maghrib and Isya only, while at the time of Dhuhur and Asr it is rarely used for congregational prayers, because residents pray in their respective workplaces. While on the second floor there are three rooms, a living room and a back room and are located at the front. From this veranda, you can directly look at Udin Rahmani street and its surroundings because the veranda on the second floor uses glass windows. While the back room is equipped with windows that lead directly to Lake Maninjau, so from this room you can see the beauty of Lake Meninjau which is not far from Rasuna Said's house.

According to some sources, this house was completed in 1917 and the number 1917 was also found on the concrete pillar of the fence to the right of the entrance. Building institutional networks in the early prevention of social conflict in urban areas is intertwined (Sopandi, 2020). The monument was built in various forms and models (Napitu, 2020). The building materials are made of wood and concrete, such as the roof with zinc material, the first floor with ceramic material on the front and middle, the back floor using cement. While the second floor uses boards with construction material from wood. The important value of building this house is related to an important historical figure in West Sumatra, namely

building Rasuna Said. This house is a sign that here was born a heroine who fought for the independence of Indonesia. For his services to the struggle for Indonesian independence, Rasuna Said was designated a National Hero on December 13, 1974.

## **II. Research Methods**

### **2.1 General Approach**

Planning for the restoration of Rasuna Said's house is carried out through a conservation approach and principles by considering the important value of the building and the technical principles of preservation as follows:

- 1) The authenticity of the material, the authenticity of the design, the authenticity of the workmanship, and the authenticity of the setting are maintained as much as possible.
- 2) The original part of the object that has been damaged or weathered and has high archaeological value, as far as possible is maintained by means of conservation; replacement with new material is only done if it is technically impossible to do it by means of conservation and must be distinguished from the original and properly documented.
- 3) The method of preservation must be "reversible", meaning that the materials and methods of preservation must be corrected, if in the future better materials and technology are found and guarantee the condition of their sustainability.
- 4) Conservation handling techniques must be effective, efficient, durable and safe for objects and the environment.

### **2.2 Implementation Method**

The stages of work in the Rasuna Said House Rehabilitation Planning are carried out in the following stages:

- a) Initial measurement and identification  
This stage is the research and documentation stage which consists of collecting data such as photos of the location and its surroundings, the existing condition of the house and its environment. The existing conditions will be taken into consideration in future planning.
- b) Architectural Recovery Plan and Structural Improvement  
At this stage the planning team will provide an overview of the existing condition of the damaged building, the factors causing it, the extent of the damage, and the plan for its handling. Each damage condition is informed in detail accompanied by photos, pictures and required information. Management plans in the form of architectural restoration and structural repairs are also informed in detail along with photos, drawings and required information, required costs, implementation methods, and implementation schedule.
- c) Development of plans  
At this stage, sketch drawings are finalized in the form of planning drawings, already containing cost calculations and technical specifications including architectural material elements.
- d) Finalization of the Design  
All planning stages have been completed including previous reports, it is only a matter of perfecting if there are revisions. Technical drawings and 3D visualizations must be completed together with the final collection of all reports.
- e) Implementation of Rehabilitation  
Carry out rehabilitation together with lecturers, students and the local community.

### III. Discussion

Restoration of buildings according to the Directorate of Protection and Development of Historical and Archaeological Heritage (1999/2000) is an activity related to the physical handling of buildings in order to restore the authenticity of the form of cultural heritage buildings and strengthen their structures if necessary which can be accounted for from archaeological, historical, and technical aspects. Restoration can be interpreted as an effort to preserve cultural heritage whose targets include structural repairs and architectural restoration which are determined based on the problems of damage encountered.

As stated in the Burra Charter (ICOMOS), preservation must maintain, repair or show as much historical traces as possible on a historical object, whether it is a building or an artifact. In addition, the preservation must also consider the safety, maintenance and future of these historical objects. The final use of a preserved building is also very important

#### 3.1 Structural Improvement

In relation to building preservation work, structural repair is an important stage of work. Structural repair work is focused on efforts to overcome and prevent all problems of damage to building structures and weathering of materials. Some of the scope of structural improvement activities are as follows:

##### a. Disassembly

This section is only carried out if it is necessary, with the aim that buildings that have undergone changes or damage can be rebuilt in a strong and stable condition. In its implementation, demolition activities must be followed by a registration system so that each dismantled element can be returned to its original place correctly and without experiencing difficulties.

##### b. Structure Repair

This activity is one of the efforts in order to strengthen the stability of the establishment of the building as needed. To determine whether or not structural reinforcement is necessary, its application shall be carried out through a building engineering approach, by observing and assessing the stability of the subgrade of the building and the applied construction system.

##### c. Maintenance/Conservation

This activity is intended as an effort to prevent and overcome all problems of damage, especially with regard to weathering of materials which will indirectly affect the stability of the building.

##### d. Element Replacement

This activity is often unavoidable considering that some materials are often found damaged or lost. In order to repair the building structure, it is necessary to procure new materials to replace the damaged or missing original building elements as needed. Requirements for replacement of these materials, among others, must use new materials that are similar and have the same quality as the elements of the original material.

##### e. Architectural Restoration

Architectural restoration activities are focused on efforts to reassemble building elements into the authenticity of their architectural forms. Restoration of buildings is always guided by the authenticity of forms, materials and workmanship, and layout and historical and archaeological values contained in cultural heritage objects.

- a) Handling of damaged original building elements. In the restoration activities, replacement can be carried out, if from a technical point of view the damaged element is no longer possible to maintain, or from a structural point of view it can disrupt the stability of the building.
- b) Handling of missing original building elements. Replacement activities can be carried out if they have clear and accountable guidelines. Replacement is done with elements that have the same shape, size and material as well as taking into account the aesthetics of the building to get a balance in its appearance.
- c) Requirements for replacement of damaged or lost building elements. The new elements must use new materials of the same type and quality. In addition, it must also be marked to distinguish it from the original material and complete documentation in verbal and graphic form.
- d) Completion of the final form of the new material to replace the original building elements that have a decorative variety, only limited to the basic form or not decorated as the original. This is an attempt to avoid confusion in maintaining the authenticity of the data.

In the feasibility study for the restoration of cultural heritage, there are several important data used in analyzing the feasibility of the restoration. The data are in the form of historical data, archaeological data and technical data. Therefore, the Rehabilitation of the Rasuna Said House Building was carried out as a Cultural Conservation Building.

#### 1. Historical Data

Historical data is the data behind the existence of a building and its important value and role in a certain historical event.

#### 2. Archaeological Data

Archaeological data is data used to explain the archeology of a building seen from the authenticity of the material, shape, workmanship and layout. This data is one of the references to be assessed whether or not restoration is feasible (Zulkarnaen, 2017). What is studied in the archaeological data is the architecture and components of the building materials as seen from the condition of the 1st floor, 2nd floor, roof, and back of the building can be seen in Figure 1 below:



**Figure 1.** Existing Plan and Condition of Rasuna Said's House

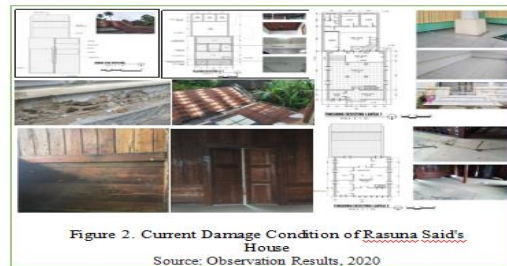
Source: Observation Results, 2020

#### 3. Technical Data on Building Damage

Technical data is the latest data regarding the state of objects seen from damage and maintenance and maintenance. This damage data is needed for rehabilitation steps, especially in the analysis of making work execution documents or detailed engineering design drawings consisting of: roof damage, ceiling damage, ceramic damage on the 1st



and 2nd floors, exterior walls, doors and kitchen. The bathroom, WC and ablution area are not functioning properly. As seen in Figure 2 below:

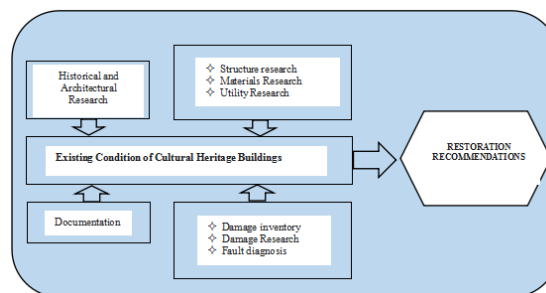


**Figure 2.** *Current Damage Condition of Rasuna Said's House*  
Source: Observation Results, 2020

The condition of the damage to the building above is feasible for rehabilitation, based on the Feasibility Study/Restore and technical study of restoration, this building is declared eligible for restoration. Therefore, to follow up the study, it is necessary to carry out rehabilitation so that Rasuna said's house can function apart from a residential house.

### 3.2 Data Analysis

Data analysis is a more in-depth study of what has been done in listening to issues and direct research on buildings related to buildings and the cultural heritage environment.



**Figure 3.** *Analysis Process*

## IV. Conclusion

### 4.1 Conclusion

Based on the results of the PKM Rehabilitation training that has been carried out at the Rasuna Said House, it has undergone several improvements and changes for the better and more useful, such as:

1. The condition of damage to Rasuna Said's house can be categorized as lightly damaged. The components that were damaged were architectural elements (non-structural), with the percentage of damage below 10% - 40% to 100%. which has been approved by the nagari guardian, customary holders and the local community and adapted to the characteristics of the Minangkabau Natural culture
2. The most dominant factors affecting the damage to Rasuna Said's house are: (a) the age factor of the material that has never been replaced, such as; tin roof, doors, windows. (b) termite factors, such as wall boards, ceilings, stairs, carvings made of wood that are eaten by termites. (c) lack of maintenance factors, such as some parts of the walls that are not regularly painted. d) a lot of damage to the drains for the ablutions, bathrooms, toilets and bathroom doors, thus hampering people's activities to pray in these places.

## 4.2 Recommendation

After this PKM Rehabilitation training is carried out, it is recommended to proceed to the Change Renovation stage and the development of a restoration plan document, namely making a Detail Engineering Design (DED) document which is useful as a guide in carrying out restoration consisting of a Work Plan and Requirements (RKS), Cost Budget Plan (RAB) and schedule the implementation of physical restoration work. Based on this document, building restoration can be carried out, namely replacement or repair of damaged component.

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