

# 04

## MALAY INFLUENCED BENCHES DESIGN

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### ABSTRACT

Outdoor benches are one of the important elements in landscape design especially at heritage sites. The design of these benches will add to the overall identity of the whole development. The purpose of this research and design is to propose an outdoor bench design that will compliment the concept of Kulliyah of Architecture and Environmental Design (KAED) Malay Heritage Living Lab at International Islamic University Malaysia (IIUM), Gombak Campus. The objective of this design is to innovate the outdoor bench design so as to incorporate the value of Malay traditional elements. For this purpose, Malay traditional design elements taken from five states in Malaysia served as the main inspiration. These states are Perak, Melaka, Terengganu, Kedah and

Kelantan. As the Malay motifs in the traditional design were derived from nature, they give a strong connection between the park and its immediate site. Other important elements in designing the furniture such as ergonomics, safety and material are taken into considerations. The outcome of this research and design exploration of Malay traditional elements from different states in Malaysia, is the discovery of a new concept of outdoor bench for heritage sites.

**Keywords:** Malay traditional elements, outdoor benches, ergonomic design

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### RESEARCH / PROJECT INTRODUCTION

KAED has identified the preservation of Malay-Muslim heritage and traditional built environment as being its niche areas. One of its initiatives is to develop a Malay Heritage Living Lab in IIUM Campus to become a real-life site or living museum for the teaching and learning activities. For this purpose, a collaborative project under the Integrated Multidisciplinary Project was devised for students to design the Heritage Living Lab overall complex. This includes the hardscape and its facilities, which includes the design of the outdoor bench. The scope of this research is limited to the Outdoor Bench design only.

### CONCEPTUAL PROCESS, PROCEDURE AND SCHEMATIC DESIGN

The Malay influenced benches design represents the history of the states in Malaysia, and its traditional and cultural heritage. The design was adapted from the case studies of traditional utilities that have the potential to be developed for human needs such as stools and benches. The chosen benches represent the symbol from each state. It is to make sure that it can give an impact to the visitors as it can also provide visitors with knowledge and history on itself. For instance, the '*kukur kelapa*' bench is derived from the Malay traditional utensil – *Kukur Kelapa*. The early designs were processed and developed accordingly to make it a convenient design.

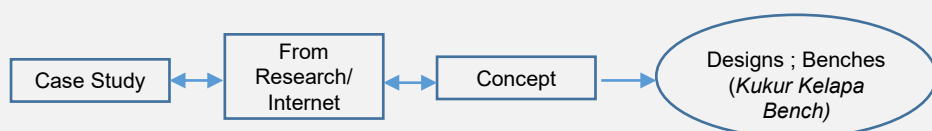


Figure 1: Flow of Design Process

### METHODOLOGY

In the commencement of this research, the methodology adapted in collecting data is to ensure comprehensiveness of the whole process. For this research, primary data used are based on observations and case studies, while the secondary data are retrieved from literature reviews. The ideas used for this project were derived from the culture and daily use of the traditional items from the state of Melaka, Perak, Kedah, Kelantan and Terengganu.



Figure 2: Examples of benches design

### OBJECTIVES

1. To propose an outdoor bench design that will complement the concept of Kulliyah of Architecture and Environmental Design (KAED) Malay Heritage Living Lab at International Islamic University Malaysia (IIUM,) Gombak Campus.
2. To explore new outdoor bench design from the value learning from the Malay traditional elements.

## BENCH 1: PERAK BENCH - KUKUR KELAPA BENCH

### PROPOSED DESIGN



Figure 3: Rendered picture



Figure 4 Kukur Kelapa  
(Source: Yusoh Bakyah, 2015)

This outdoor bench design was inspired from a famous traditional utensil that is well-known around Malaysia - *Kukur Kelapa*.

*Kukur Kelapa* is a daily utensil that was used in the past to extract the coconut's content to make ingredients for their traditional dishes.

*Kukur Kelapa* is the perfect choice for an outdoor bench as it was originally designed to cater for one-person sitting while performing his/ her task. In addition, the object is usually ornamented with Malay motifs.

### DETAILS



Figure 5: Motif *Bunga Padi*

For this specific bench, the Malay motif chosen to adorn it is Bunga Padi motif. This motif is widely used in the Malay woodwork, architecture and even fashion especially at the northern states.

The proposed material used for this bench is Kayu Balau and Concrete. These materials are preferred as they are strong, can withstand different temperatures and weather, as well as will not harm the environment.

### TECHNICAL DRAWING

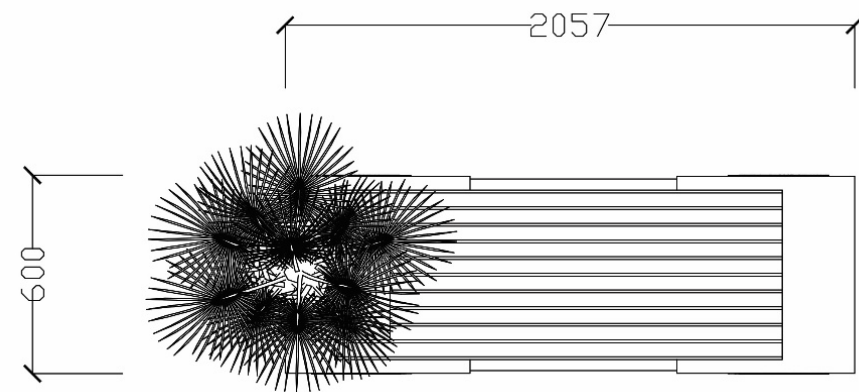


Figure 6: Plan Elevation

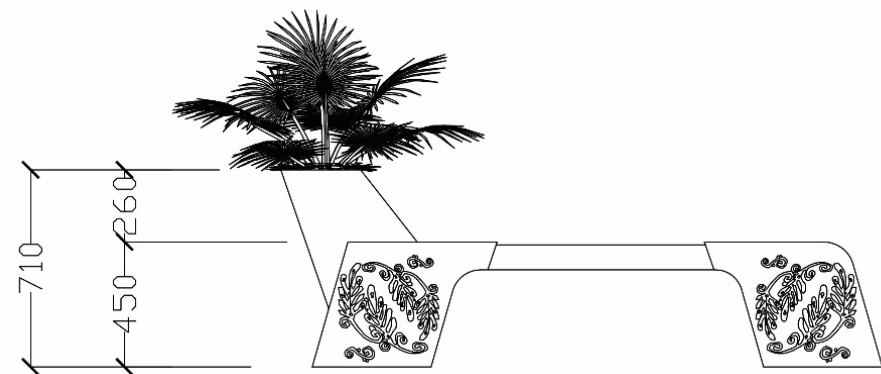


Figure 7: Front Elevation

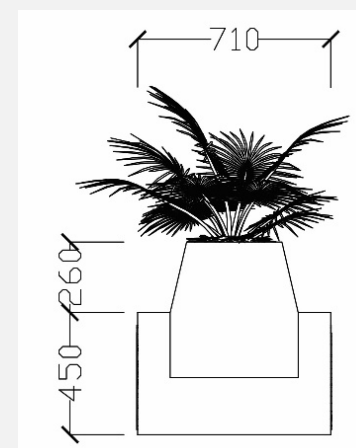


Figure 8: Side Elevation

## BENCH 2: MELAKA TRANSPORTATION - *BECA* BENCH

### PROPOSED DESIGN



Figure 9: Rendered picture



Figure 10: Beca  
(Source : Muzium Negara, 2020)

### DETAIL

This outdoor bench design is inspired from the famous traditional transportation that is well-known around Melaka – the *Beca*.

*Beca* is a daily transportation that is used around Melaka to provide rides, especially to the tourists, who want to see the old Melaka town in comfort.

This vehicle is a perfect choice as a subject matter for an outdoor bench that represents Melaka as it is originally designed to fit 2 to 3 persons sitting per ride at once, plus it is usually ornamented with Malay motifs.

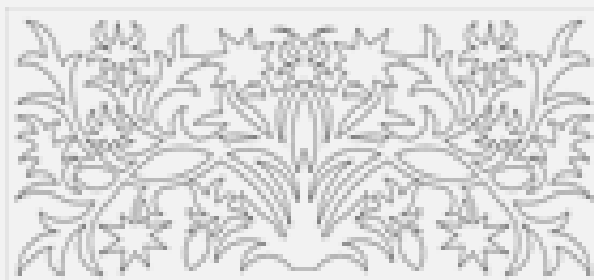


Figure 11: Motif Sulur Daun

*Sulur* is known by various names such as *Sulur Bayung*, *sulur daun* and others, as a form of engraving that resembles a body-plant sower shape. The lines that exist in the sapling sucker, for example, seem to grow from one source and from that source the sucker appears to grow and move out slowly and gently. Motif *sulur* is the motif *batik* that is inspired from the shape of the leaf blade, while the leaf motif is a motif of *batik* that is basically shaped leaves that are painted in such a way as motifs of leaves. Motif Sulur Daun is chosen because this motif is easily seen around Melaka, usually used as decoration on mosques and in batik design.

### TECHNICAL DRAWING

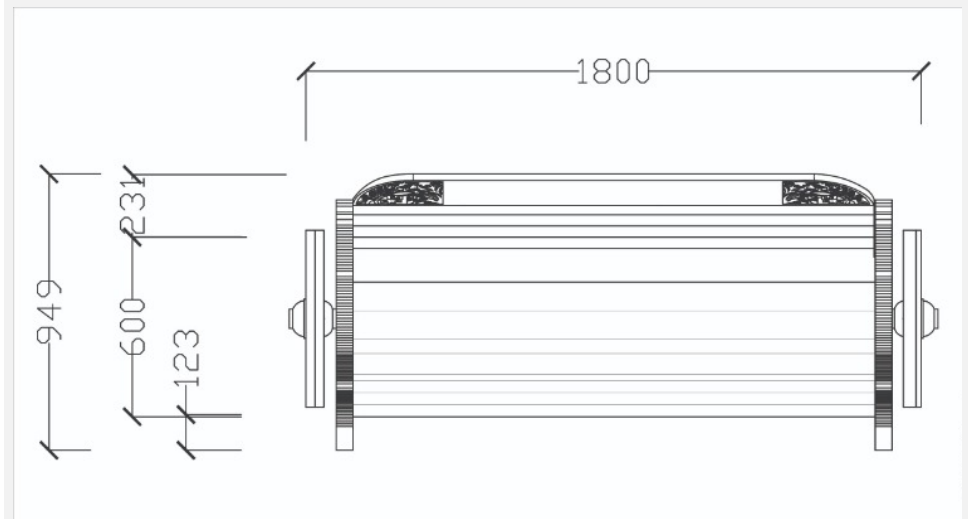


Figure 12: Plan Elevation

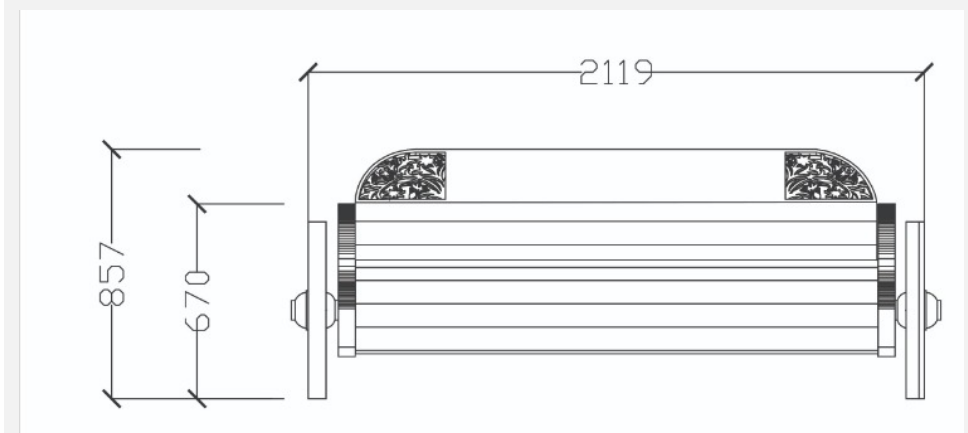


Figure 13: Front Elevation

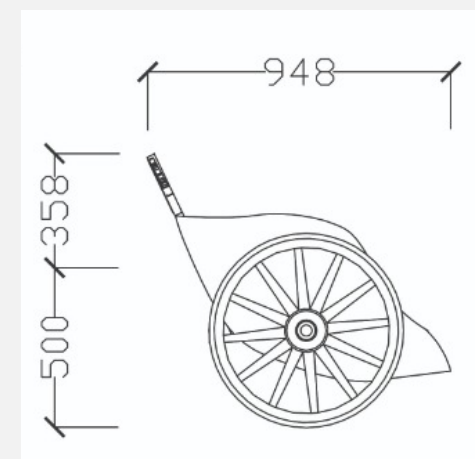


Figure 14: Side Elevation

### BENCH 3: KEDAH BENCH – CONGKAK BENCH

#### PROPOSED DESIGN

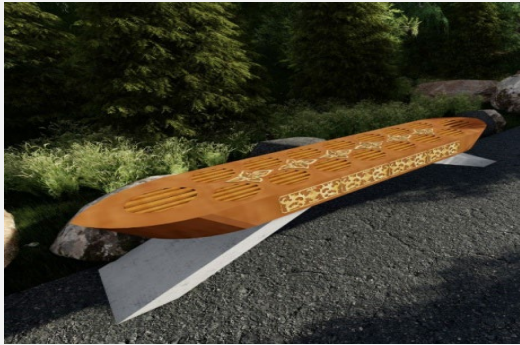


Figure 15: Rendered image

This outdoor bench design was inspired from a famous traditional games that are well-known around Kedah. It is called a *congkak*.

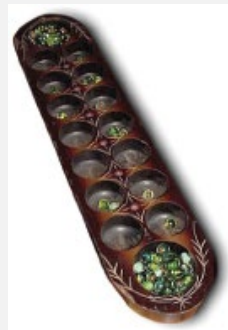


Figure 16: Traditional congkak  
(Source : Muzium Negara, 2020)

*Congkak*, which is often considered a game for girls, has simple rules that allow the boards to have different numbers of holes. *Congkak* boards are often made of teak or mahogany wood that are often elaborately carved into various shapes such as *naga* or birds.

This item is the perfect and suitable choice as a subject matter for an outdoor bench as it is originally designed to symbolize the Malay culture.

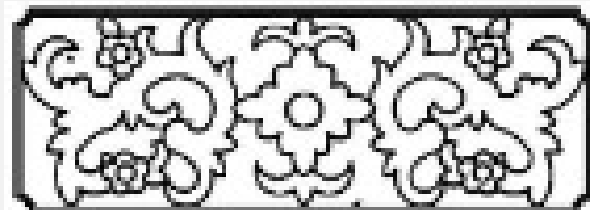


Figure 17: Motif Tampuk Manggis

The motif used for this bench is called motif *Tampuk Manggis* or *mangosteen*. This motif shows the image of a mangosteen split in the middle which shows the outer skin and white inner flesh of the fruit.

The depiction of this batik motif carries the meaning that moral goodness and the fineness of one's heart cannot be seen from the skin alone. This motif is widely used in Malay woodwork. It is also usually found in the Kedah traditional Malay house.

The materials used for this bench are Balau wood and concrete. Balau wood is suitable for outdoor usage because of its durability while the concrete is used for the bench's stand.

#### TECHNICAL DRAWING

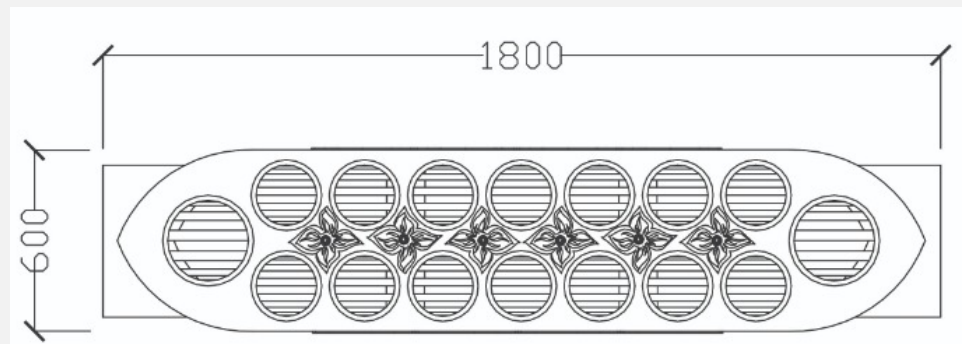


Figure 18: Plan Elevation

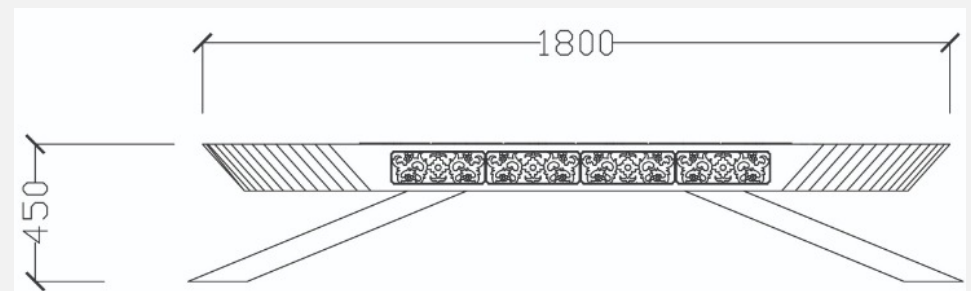


Figure 19: Front Elevation

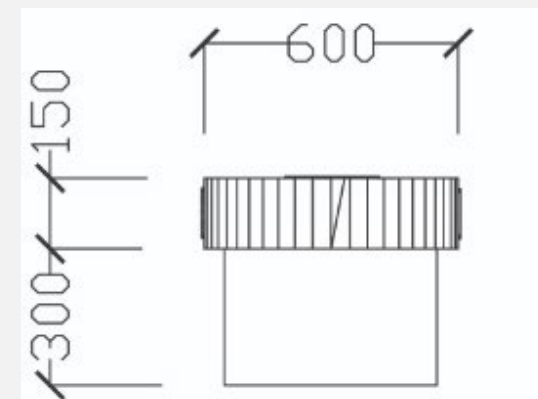


Figure 20: Side Elevation

## BENCH 4: TEREANGGANU BENCH – SAMPAN BENCH

### PROPOSED DESIGN



Figure 21 Rendered picture



Figure 22: *Sampan*  
(Source: Author, 2006)

The *Sampan* bench can cater up to three person at one time. Its design is inspired from the *Sampan*, a traditional transportation that is commonly used around the coast and riverine of Malaysia especially in the east coast region.

According to Oxford dictionary, *Sampan* can be described as a small boat of a kind used in East Asia, typically with an oar or oars at the stern.

This selection of *Sampan* as a subject matter is significant as it highlights and reflects the identity of Terengganu, which is famous for its wooden boat (*sampan*) making. Until now, the world's most famous handmade wooden boatbuilders are located on Pulau Duyung, Terengganu.

### DETAIL

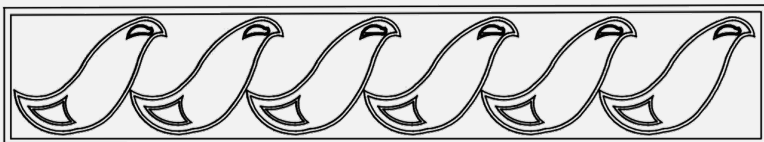


Figure 23 Motif Itik Pulang Petang

*Itik Pulang Petang* has been chosen as the motif to be adorned on the bench design. This motif were often used at Malay traditional houses. Motif engraved is similar to a row of walking ducks portraying the nature of the animals that usually walk in line behind their leader.

The material used for this bench is *Balau* timber. This timber is selected due to its durability, sustainability and ability to withstand extreme weather conditions. It is also best for wood carving as it is relatively easy to work with.

### TECHNICAL DRAWING

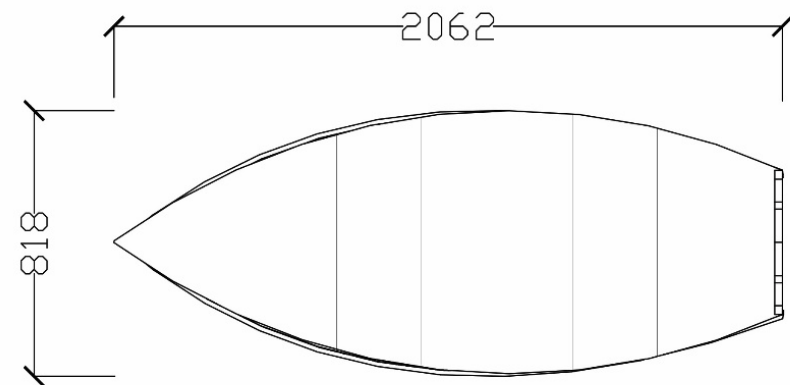


Figure 24: Plan Elevation

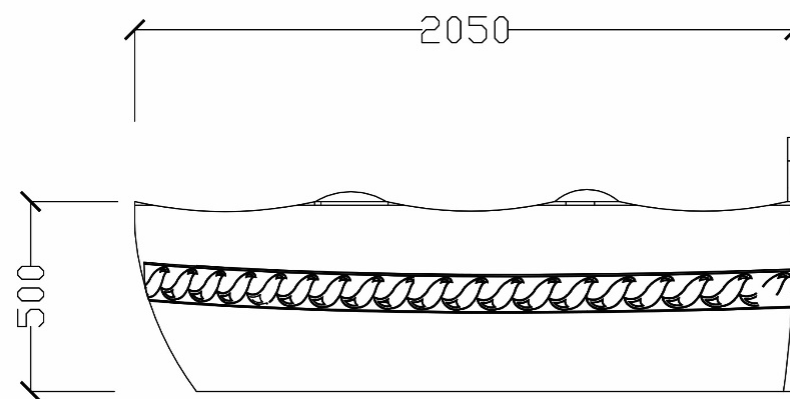


Figure 25: Front Elevation

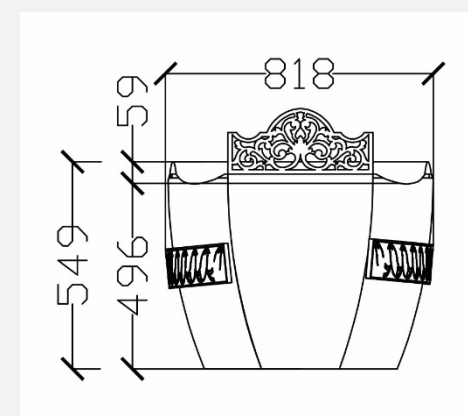


Figure 26: Side Elevation

## BENCH 5: KELANTAN'S IDENTITY - REST BENCH

### PROPOSED DESIGN



Figure 27: Rendered picture



Figure 28: Pangkin  
(Source: Ahmad, A. S., Bakar, J. A., & Ibrahim, F. K., 2006)

This bench design is inspired from decking (*pangkin*) that complements some Malay houses in their courtyards.

*Pangkin* or *Pelantar* is known as a long low bench or decking which is usually located at the compound of traditional Malay house under the shade of mango or coconut trees. The pangkin is also used as a rest area after working or for chatting amongst neighbours.

Pangkin is a good selection as a subject matter for plot 4 because it really resembles Malay culture and very popular among Kelantan traditional houses.

### DETAIL

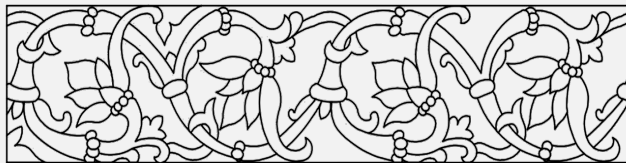


Figure 29: Motif Awan larat

*Awan Larat* is a well-known motif in wood carving and has been used widely in traditional Malay houses especially in Kelantan and Terengganu. To make *awan larat* motif more realistic, a technique called '*silat*' is recommended to emboss or to dilute the carving form (Yahya, 1995). In some context, the term 'awan' has long served as a name for a variety of patterns found in Malay ornaments. This is particularly evident in the works of old Malay design as can be seen in classical Malay literature.

### TECHNICAL DRAWING

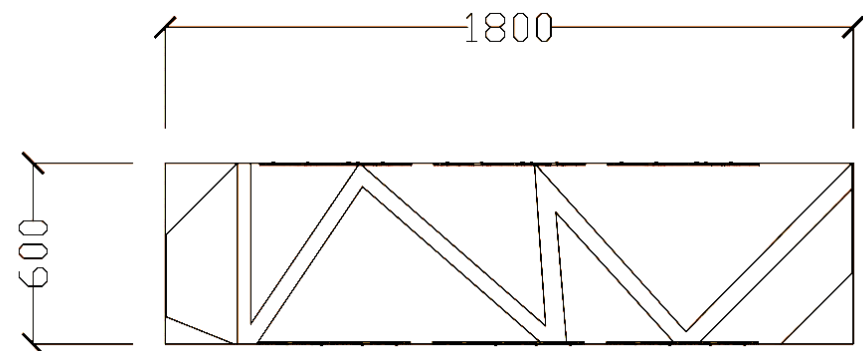


Figure 30: Plan Elevation

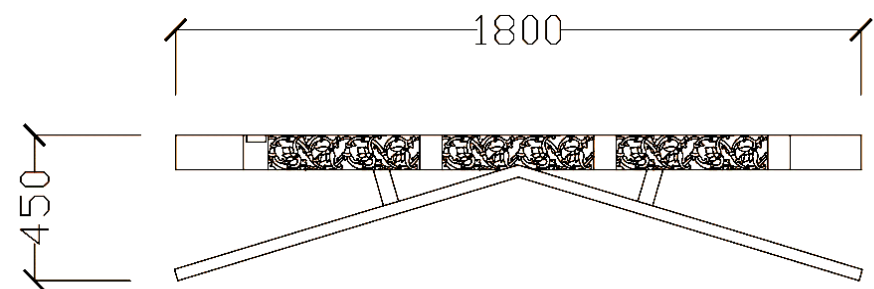


Figure 31: Front Elevation

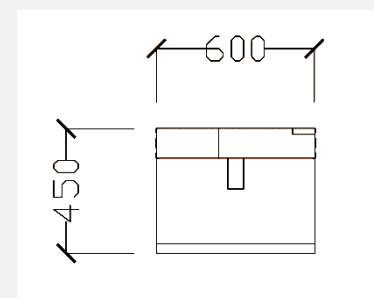


Figure 32: Side Elevation

## CONCLUSION

Benches as one of the main elements in the landscape design require special care in their selection and design. Benches vary in design and style. For the purpose of association with the project on Malay cultural heritage park which focuses on heritage living lab, the project team had designed benches based on the Malay traditional elements. This paper explains the values of traditional culture in Malaysia by conducting research on benches design from the state of Perak, Melaka, Terengganu, Kedah and Kelantan. The study illustrates that there is a great relationship between parks and the Malay heritage from the types of floral motives that are applied on the traditional benches. The successful application of the Malay cultural design can be summarised in the preservation and application of the design using sustainable materials and the use of Malay traditional motifs in a contemporary forms.

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