

Inventory Evaluation of Decorative Elements of Traditional Malay's Houses: Rumah Limas Johor (RLJ)

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Article Info**Volume 81****Page Number: 4008 - 4017****Publication Issue:****November-December 2019****Article History****Article Received: 5 March 2019****Revised: 18 May 2019****Accepted: 24 September 2019****Publication: 19 December 2019****Abstract:**

Within traditional Malay buildings, the presence of decorative elements reflects the convergence of functionalism and architectural aesthetics. Its ornamentation, shape and pattern reflect the uniqueness of local craftsmen and master carvers; particularly within woodcarving and bamboo weaving. Described as non-structural and "additional" constructing members, there are at least 16 decorative characteristics of the traditional Malay house, recognized by the earlier research fellow. There are Tunjuk Langit, Sisik Naga, Sulur Bayung, Ande-Ande, Pemeleh, Kepala Cicak, Tiang Gantung, Lebah Bergantung, Kekisi, Gerbang, Gerbang Pintu Sesiku Keluang, Pagar Musang, Kepala Pintu and Kepala Tingkap. Traditional houses have been classified architecturally in Malaysia based on roof structure, spatial organization and geographical context, which have finally been named after the states. Every traditional house in the state of Malaysia signifies the specific state style and architectural features. This article describes the research on the traditional Malay houses in Johor State known as Rumah Limas Johor (RLJ) of these decorative elements. In order to study the form, terms, and features of decorative elements, site findings were made on chosen 27 RLJ houses situated across the district of Muar, Tangkak and Batu Pahat. For the establishment of architectural terminology and typology based on the type and design of each decorative item, inventory research on visual data and verbal data was performed. The study concluded that the significant characteristics of RLBP were 7 decorative elements; often with different names, shapes, and styles from other states. These similarities and dissimilarities contribute to enriching Malaysia's traditional house's aesthetic theory and philosophy.

Keywords: Decorative elements; Malay traditional house; Rumah Limas Johor.**1. INTRODUCTION**

Decorative elements in Malay's Traditional architecture is one of the Malay's most intricate and amazing heritage. It was also representing a Malay's Symbols, the Arts, the Science and the Good of of design work by previous Malay's craftsmanship or carpenter. In fact, according to Ezrin Arbi (1997), while conventional architecture has been viewed as outdated or obsolete, architects, historians, and anthropologists have always been the primary source of reference in social and cultural studies. Therefore, the word 'architecture is the embodiments of society and its cultural practice' reflects the way of life, belief and ideology of society; 'all encompassing; forms important components in a culture's uniqueness. In traditional Malay houses, the presence of decorative elements reflects the convergence of functionalism and architectural aesthetics. Its ornamentation, shape and pattern represents The uniqueness of local craftsmen and master carvers, especially in woodcarving and bamboo weaving. According to Abdul Halim and Wan Hashim, 1986; Jenkins, 2010 found in Nursuriani and Ismail (2013), a decorative feature or architectural elements are deliberately designed to

facilitate and convey reverence for Malay culture through the ornamental design framework.

2. LITERATURE REVIEW**AN OVERVIEW OF TRADITIONAL MALAY HOUSE (RUMAH LIMAS JOHOR)**

According to Narifumi (1994), the ancient history of Johor is not clearly describe. However, the old lavanese text *Nagarakertagama* composed in 1365 mentions Ujong Medini, that is, Land's End, along with Muar (north-west of the Johor State), Tumasik (Singapore), and Pahang (a northern state to Johor) justify that the early settlement of Johor was begin there. It was agreed by Malay Annals (*Sejarah Melayu*) which mentioned the district of Muar and Batu Pahat in their series which:

'On the way from Singapore to Melaka, Sultan Iskandar Shah (Raja Iskandar) took up temporary abode in Muar leaving his minister at Sening Ujong during the time of Sultan Muzaffar Shah the Siamese attacked Melaka and the Siamese fleet stopped at Batu Pahat where they dug a well.'

Based on that statement, it was indicate that the early settlement of Johor was start at the riverbank of Johor River, which possibly located at the district of Muar, Tangkak,

Batu Pahat and Pontian. Hence, most of the Malay's Traditional Houses was built around the selected area as to showing the early settlement of Johor. During that time, the majority of 'Rumah Limas' The architectural influence of Johor's Riau-Lingga was in Indonesia, Dutch and English styles (Mastor Surat et-al, 2010). It was agreed by Wan Hashimah (2003) which stated that the The citizens of Bugis were migrated after the arrival of the Dutch East India Company in 1669 with the intention of monopolizing trade in spices (Blusse, 1996). In addition, more Bugis have migrated to other parts of Indonesia and other countries, including Malaysia. As a result, most of Johor's architectural style was inspired by their history.

Various of traditional and hybrid The house of Malaya can be defined primarily by its simple roof shapes (Mastor Surat et-al, 2010). We further clarify that there are two (2) groups of the Traditional House of Malaysia which are: Rumah Bumbung Panjang

Bumbung panjang, characterized by a long gable roof, is the most common form of the house. The bumbung panjang houses in Peninsular Malaysia are the oldest identified,

many of which are over a hundred years old, still in good condition. It's got a simple thing, kingpost-supported gable roof. The most widely known roofing material utilized for bumbung panjang is the attachment (an attachment made of nipah and other palm trees grow in local natural vegetation (Mastor Surat et al, 2010).

- a) Rumah Bumbung Lima and Limas
It was transformed from Rumah Bumbung Panjang over the years. The roof shapes of Rumah Berbumbung Limas was architecturally derived from pyramidal concept and fitted with 'V' shape 'tebar layar' at the top of the roof as to allow natural ventilation to coolest the house.

3. DECORATIVE ELEMENTS OF TRADITIONAL MALAY HOUSE

On the decorative elements of traditional Malay houses, few studies have been done. Referring to Diagram 1, Mohd and Sufian (2013) listed fifteen (15) decorative elements and described in more detail in Table 1 within a specific conventional Malay house:

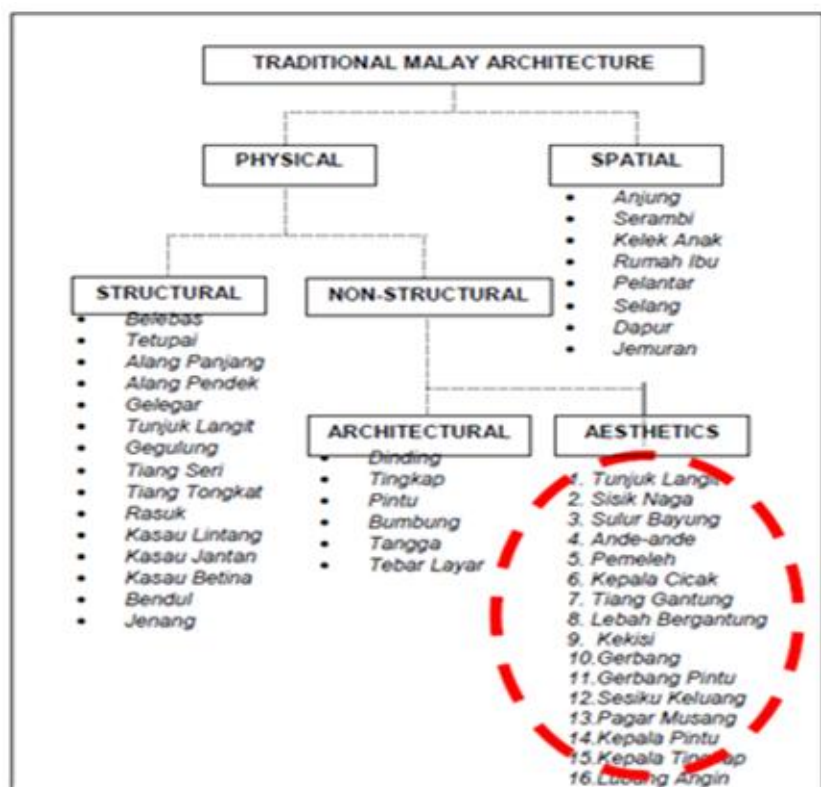
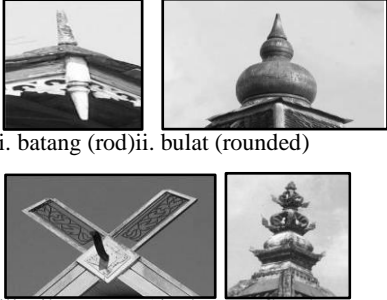


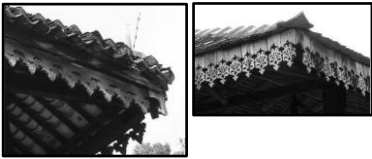








Figure 1. Decorative Elements of Traditional Malay House
Source: Sabrizaa and Sufian (2013)

Table 1. Decorative Elements of Traditional Malay House

Nos	Decorative Elements	Photos	Description
A	TunjukLangit(<i>literally means pointed to the sky</i>)	 <p>i. batang (rod)ii. bulat (rounded) iii. silang (cross)iv. bunga (floral)</p>	<p>It is a piece of decorative element in an upright position at the tip of the gable end; commonly used in houses and palaces in Peninsula Malaysia. In general this type can be further categorised into few basic types; i. batang (rod), ii. bulat (rounded) iii. silang (cross) and iv. bunga (floral). The batang type is a piece of decorative timber or rod and is commonly used for Bumbung Limas roof. It has been observed that the the rounded and floral is commonly used on bumbung perabung lima or pyramidal type of roofing and is positioned in the middle top of the roof. Most are made of carved timber solids but of late there has been practices found to have used the concrete mix similar to the one used for the Malay gravestones. Commonly called buah buton in Kelantan and buah gutung in Terengganu</p>
B	Sisik Naga (<i>literally means dragon fin</i>)		<p>Sisik naga refers to the decorative carvings along the ridge of a roof (perabung and rabung atap). Sisik naga are decorative architectural elements can be found in palace architecture, residential and religious buildings in Indochina, Malaysia, Thailand and Indonesia. Other names are kemuncak, naga-naga, puncak rabung.</p>
C	SulurBayung		<p>Sulur bayung refer to a decoration on the corner of a roof edge. Other names are sulo bayung, sayap layang-layang, sayap layangan, ekor Itik, anjong balla', som. In the traditional architecture of Bugis Makasar it is also called anjung balla, that means a decoration on the corner of a roof representing the creeping plants. Mohd and Sufian (2013).</p>
D	Ande-Ande		<p>Ande-ande is the horizontal decorative timber roof eaves covering the timber rafters (kayu kasau) Other names ande-ande are papan meleh, papan pator, papan cucuran atap, papan kaki atap, kening, papan tumpu kasau, papan cantik. There are at least two types of ande-ande which are the single piece type with carvings on a single long timber piece and multiple pieces) with carvings on multiple timber pieces arranged side by side.(Mohd and Sufian, 2013)</p>
E	Pemeleh		<p>Other names for kayupemeleh are peles, pemeles, papanlayan. Kayupemeleh is actually a pair of timber pieces located on two fascia ends of a gable roof (tebarlayar). The ones covering kasaulintang or kasaujantan is called peles or pemeleh in Kelantan and Terengganu but called papanlayang elsewhere. Kayupemeleh or peles is shaped slightly curving and sharpens towards the top as a sign of strength in the design language of houses in Kelantan, Terengganu on the East coast and also in Cambodia and Pattani in Thailand. Yusoff and Rashid (2012)</p>
F	KepalaCicak(<i>literally means lizard head</i>)	 <p>i. 'L' type ii. 'I' type</p>	<p>Zulkifli Hanafi (2000) identified kepala cicak as a type of end decoration to tumpu kasau or papan meleh. There are two types of kepala cicak which are the „L” type with the end timber pieces positioned abutting to one another at corners of the roof eaves (bucu atap) and the „I” type with a single end timber piece positioned on chamfered corners of roof eaves (bucu atap)</p>

G	TiangGantung(<i>literally means hanging column</i>)		Other names for tiang gantung are, saka bentung, tiang guntung, tiang sotoh. Traditional houses in Negeri Sembilan it looks like a small carved hanging column positioned at the tip of the alang that is supporting the main kasau jantan serambi and is called tiang guntung. Also called saka bentung in the traditional Javanese architecture and on the house of Negeri Sembilan it is known as tiang sutoh.
H	LebahBergantung(<i>literally means hanging bees</i>)		Halim (1987), Norhasandi (2012) and Jahn. (2017) uses lebah bergantung (hanging bees) to describe it in his narration of Kutai houses in Perak; as a style of hanging column at the end of alang panjang, rumah ibu, that is constructed as a set (left and right) on the bottom of the gable end of the roof (tebar layar). It is round in shape the size of the local water vessel (labu air) looking very similar to the bees' nest.
I	Kekisi(<i>other names Kisi-kisi, kekipas, jeriji, jeruji, terali</i>)		Decorative piece of timber or rod used at the opening of a window function as window grill.
J	Gerbang(<i>Archway</i>)		Decorative piece of timber as an arch at entrance of a house or used for dividing space usually between Anjung and RumahIbu of the main house.
K	GerbangPintu(<i>Arch door</i>)		Decorative piece of timber at the top of the door opening
L	SesikuKeluang(<i>other names Tupai-tupai</i>)		Decorative piece of timber normally in shape of triangle fix to the column and sometime function to support the beam. Otherwise it is for decorative purpose.
M	PagarMusang		Balustrade In the form of timber rod or timber plank often beautifully carved and arranged to decorate the window opening. It is function as safety features apart from its aesthetical role Other names known as Jeriji, Jerejak, PagarTinggalung.
N	KepalaPintu(<i>literally means door head</i>)		Decorative piece of timber on top of the door. Normally carved with floral pattern, Quranic verses calligraphy or simple motif of jejala (lattice work). Apart from aesthetical reason its function is to allow sufficient cross air ventilation to flow into the house.
O	KepalaTingkap(<i>literally means Window head</i>)		Decorative piece of timber on top of the window. Normally carved with floral pattern, Quranic verses calligraphy or simple motif of jejala (lattice).

Source: Sabrizaa et al. (2018)

4. RESEARCH METHODOLOGY

This study is a visual observation research about Decorative Elements on Traditional Malay House focusing on RumahLimas Johor. As mentioned earlier this study is intend to investigatethetype of decorative elements on RumahLimas Johor (RLJ) in the context of inventory analysis. Based on previous researcherSabrizaa and Sufian (2013),in conventional Malay houses throughout the country, at least 15 decorative elements have been found.Hence, an exploratory research wereconduct through site observation on several houses at the District of Muar, Tangkak,

BatuPahat and Pontian to established an inventory data of decorative elements at RumahLimas Johor. For this study, 26 houses have been selected and coded (Table 2). The selection was made on the basis of their authenticity level, type of architecture, Current physical state, availability and geographic factors.In terms of conventional architectural style, many houses were found to have made major renovations by the owner and have lost their ingenuity. Few houses have also been found abandoned and left by the owner, making it difficult for the study to enter them.Several houses have been found to be

heavily damaged and destroyed, some of the factors that contribute to restricting the study's range. Lastly, the selected 26 houses were considered to be among the authentic RLJs still surviving and intact representing Johor's RLJ state (Table 2) were completed during this study. Visual data documentation was collected using the EOS DSLR Canon 6D camera while a semi-structured interview was conducted to gather verbal data from the house owner or occupancy. Both data have been utilized to analyze and classify the form

of Decorative elements of the selected RLJ. The findings were reported on the basis of the visual tabulation and inventory evaluation of the report.

5. ANALYSIS AND DISCUSSION

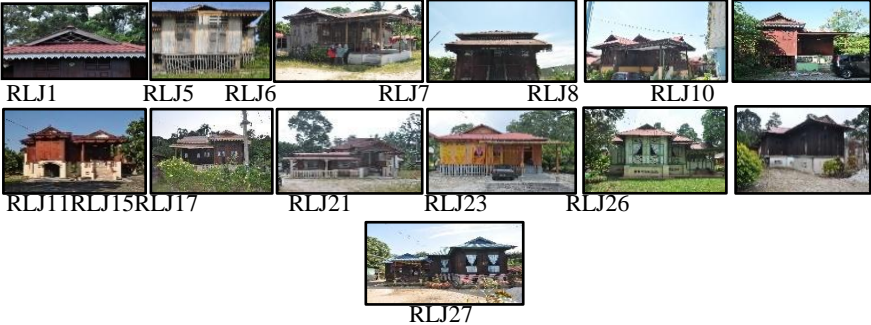


According to the site visit and observation to the district which been considered as an early settlement of Johor, there are twenty-six (26) Malay Traditional House in the context of RLJ complete with global positioning station (GPS) was identified as follows:

Table 2. Location of Traditional Malay House – Rumah Limas Johor

No.	Code	Location	Traditional House	GPS
1	RLJ 1	Muar 1	En Mokhtar Masnot	1.9839767217636108, 102.62134552001953
2	RLJ 2	Muar 2	Hj Hassan Bin Ali	1.9896643161773682, 102.6170883178711
3	RLJ 3	Muar 3	Hj Adnan Hj Kasan	2.010014295578003, 102.63230895996094
4	RLJ 4	Muar 4	Hjh Mastijah Hj Hashim	2.0694141387939453, 102.57777404785156
5	RLJ 5	Muar 5	Rumah Perjumpaan Dato' Onn	2.0673136711120605, 102.57295227050781
6	RLJ 6	Muar 6	Hj Sirat Bin Wongso	2.074946403503418, 102.56961822509766
7	RLJ 7	Muar 7	Mohd Noor Bin Mumba	2.047588, 102.597622
8	RLJ 8	Muar 8	Tn Hj Ismail Bin Sharif	2.0516326427459717, 102.57233428955078
9	RLJ 9	Tangkak 1	Hjh	2.1494321823120117, 102.5612564086914
10	RLJ 10	Tangkak 2	Hj Ali Haji Husin	2.1592586040496826, 102.5587387084961
11	RLJ 11	Tangkak 3	Hj Hamzah Hj Hassan	2.1592586040496826, 102.5587387084961
12	RLJ 12	Tangkak 4	En Johari Abdul Rahman (OKU)	2.1644864082336426, 102.55673217773438
13	RLJ 13	Tangkak 5	Hj Yusof Abdullah	2.0862557888031006, 102.53794860839844
14	RLJ 14	Tangkak 6	Tn Hj Bakar Hj Harun	2.0826587677001953, 102.54164123535156
15	RLJ 15	Tangkak 7	Kakak Jaafar Onn	2.0796127319335938, 102.5452651977539
16	RLJ 16	Benut 1	Hj Rostam Hj Abd Kadir	1.6430389881134033, 103.29680633544922
17	RLJ 17	Benut 2	Hj Abd Rahman Kasan (Kini En Zaki Hj Yusof) – Ygbagi Kayu Ukir	1.6880640983581543, 103.28093719482422
18	RLJ 18	Benut 3	Daeng Marpunah (Kini En Mohamad Noor Bin Daeng Marpunah)	1.6742193698883057, 103.22491455078125
19	RLJ 19	Benut 4	Parit Karimun	1.6798202991485596, 103.23563385009766
20	RLJ 20	Benut 5	Parit Makueseng	1.623819351196289, 103.2294692993164
21	RLJ 21	Batu Pahat 1	Hj Omar Abu Hasan (Kini Hj Md Noh Bin Hj Omar)	1.8820103406906128, 102.78423309326172
22	RLJ 22	Batu Pahat 2	Maan Bin Ahmad	1.8837379217147827, 102.78175354003906
23	RLJ 23	Batu Pahat 3	Isnin Bin Ujan (Kini Khairul Rizal Bin Ibrahim Bin Isnin)	1.8789409399032593, 102.78873443603516
24	RLJ 24	Batu Pahat 4	En Rosli Bin Latif	1.8784593343734741, 102.78955841064453
25	RLJ 25	Batu Pahat 5	Mat Som Hj Ahmad (Kini Fatimah Bt Mat Som, KL) – sebelah Z&D Homestay	1.870325, 102.801342
26	RLJ 26	Batu Pahat 6	Hj Kasnon, (Kini Rukayah Kasnon) Parit Surau Darat	1.829043, 103.128861
27	RLJ 27	Batu Pahat 7	Ganio Bin Kroman (Kini Hamdan Ganio)	1.8361899852752686, 103.13679504394531

Table 3. Analysis Of Decorative Elements At Malay's Traditional House: Rumah Limas Johor

Nos	Decorative Elements / Coding Code	Inventory Analysis
A	Tunjuk Langit (<i>literally means pointed to the sky</i>) / TL	
B	Sisik Naga (<i>literally means dragon fin</i>) / SN	Not Available
C	Sulur Bayung / SB	Not Available

D	Ande-Ande/ AA	 <p>RLJ1 RLJ5 RLJ6 RLJ7 RLJ8 RLJ10 RLJ11 RLJ15 RLJ17 RLJ21 RLJ23 RLJ26 RLJ27</p>
E	Pemeleh/ P	 <p>RLJ2 RLJ5 RLJ8 RLJ10 RLJ11 RLJ12 RLJ13 RLJ16 RLJ17 RLJ18 RLJ19 RLJ22 RLJ24 RLJ26 RLJ27</p>
F	KepalaCicak(<i>literally means lizard head</i>) / KC	Not Available
G	TiangGantung(<i>literally means hanging column</i>) / TG	Not Available
H	LebahBergantung(<i>literally means hanging bees</i>) / LB	Not Available
I	Kekisi(<i>other names Kisi-kisi, kekipas, jeriji, jeruji, terali</i>) / K	Not Available
J	Gerbang(Archway) / G	 <p>RLJ2 RLJ12 RLJ14 RLJ17 RLJ19 RLJ22 RLJ23 RLJ27</p>
K	GerbangPintu(Arch door) / GP	Not Available
L	SesikuKeluang(<i>other names Tupai-tupai</i>) / SK	Not Available
M	PagarMusang/ PM	 <p>RLJ2 RLJ3 RLJ4 RLJ5 RLJ6 RLJ7 RLJ8 RLJ9 RLJ10 RLJ11 RLJ12 RLJ14 RLJ15 RLJ16 RLJ17 RLJ18 RLJ19 RLJ20 RLJ21 RLJ23</p>

N	KepalaPintu(<i>literally means door head</i>) / KP	<p>RLJ 24</p>  <p>RLJ1 RLJ3RLJ4 RLJ6RLJ7 RLJ8RLJ10 RLJ11 RLJ14 RLJ15RLJ16 RLJ17</p>  <p>RLJ18 RLJ20 RLJ21 RLJ22RLJ23 RLJ24 RLJ26</p>
O	KepalaTingkap(<i>literally means Window head</i>) / KT	 <p>RLJ2 RLJ3RLJ4 RLJ5RLJ6 RLJ7RLJ8 RLJ9 RLJ10 RLJ11RLJ 12</p>  <p>RLJ13 RLJ14RLJ15 RLJ16 RLJ17 RLJ18RLJ19RLJ20 RLJ21 RLJ22 RLJ23RLJ24</p>  <p>RLJ25 RLJ26 RLJ27</p>

Table 4. Summary Of Inventory Analysis Of Decorative Elements At Malay's Traditional House (Rumah Limas Johor)

Decorative Elements / Coding	House Code – RumahLimas Johor (RLJ)																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Roof																											
TunjukLangit (TL)																											
Sisik Naga (SN)																											
SulurBayung(SB)																											
KepalaCicak (KC)																											
AndeAnde (AA)																											
KayuPemeleh (KP)																											
TiangGantung (TG)																											
LebahBergant ung (LB)																											
Wall																											
SesikuKeluan g (SK)																											
Kekisi (K)																											
Door																											
Gerbang (G)																											
GerbangPintu (GP)																											
KepalaPintu (KP)																											
Window																											
KepalaTingka p (KT)																											
PagarMusang (PM)																											

6. FINDINGS

According to the Table 4, it was clearly shown that seven (7) decorative elements which TL, AA, KP, G, KP, KT and PM become a key decorative elements for RLJ instead of sixteen (16) decorative elements as mention by Sabrizaa and Sufian (2013). Based on data obtained, the highest record inventory of decorative elements that available at RLJ (in sequence) as follows:

- a) KepalaTingkap – 26/27
- b) PagarMusang – 23/27
- c) KepalaPintu – 19/27
- d) KayuPemeleh – 15/27
- e) AndeAnde – 13/27
- f) TunjukLangit – 9/27
- g) Gerbang – 8/27

The study identified and highlighted the presence of decorative elements on RumahLimas Johor (RLJ). The aim of this study is to look into the architectural characteristics by investigating the availability of decorative elements of that particularhouses. Based on inventory analysis been done, it can be concluded that,

- a) There are seven (7) decorative element from sixteen (16) which outlined by Sabrizaa and Sufian (2003) been recognised as a main component of RumahLimas Johor.
- b) From the field survey, KepalaTingkap (KT) were found as major decorative element in Rumah Johor since twenty six (26) house from twenty seven (27) house are available. In architectural style, most of the design of KT were influenced by the flora motifs with the design based on semicircular or fan like shape with different composition. Nevertheless, the existence of KT was not only for aesthetic purpose, it was implemented a good natural ventilation concept which are allowing the air movement in the house as well. This indicates that most of RLJ house provides a decent cross ventilation by maximizing wall openings. In the meantime, a decorative elements of KepalaTingkap was actually similar with the ornamentation for KepalaPintu. From the survey also found that, nineteen (19) of

twenty seven (27) RLJ has been implement the KepalaPintu as a decorative elements for their house. In detail, this two decorative elements was designed as above an eye level as to give a privacy to the building ooccupants and it was accomplish with the characteristic of Malays and Islamic culture as to protect 'aurat' among their occupants.

- c) Furthermore, the window design for RLJ also implement the characteristic of others Malay Traditional Houses which is TingkapLabuh (literally means long window). The main characteristic of this window is actually designed to provide Opening the full height from the floor level up to the 5-6 feet. Since it was designed by a full height opening, RLJ has been secured with the implementation of PagarMusang (literally means balustrade) as to safety purpose. From the survey, most of the RLJ found that at least 4 inches to 5 inches of carved wood were used. as a PagarMusang while the designed of that particular element is actually adapted from flora motifs as well. In addition, the majority of the window at RLJ was equipped by openableloved window, which can be adjustable based on their preference.

7. CONCLUSION AND RECOMMENDATIONS

In short, a Decorative elements have been considered as additional elements which more give architecturally ornamentation instead to function as structural elements. However, this decorative elements ha play an Important role in the shaping of the characteristic of identity for each house particularly for RumahLimas Johor.

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