

MONIER

Roofs That Endure Heritage Roof Design in Malaysia

A roof protects a house.
Clay protects generations.



Part of **BMI**

Published by:
BMI Roofing Systems Malaysia

Foreword

This booklet brings together observations from projects and buildings we have encountered across Malaysia over time.

Many of these roof forms are familiar, but often not discussed in detail. In working alongside architects and project teams, we have seen how consistently these forms respond to climate, material performance, and long-term use.

The intention here is simply to document and share these observations, particularly for architects working on heritage and heritage-inspired projects, where the roof continues to play a defining role.





Architecture That Outlives Generations

Architecture is often recognised through its facades, materials, and spatial experience. Yet the roof plays a quiet but defining role in shaping a building's silhouette and how it sits within its surroundings.

Across Malaysia, rooflines have long shaped towns, villages, and cities, often without drawing attention to themselves. From traditional Malay houses to colonial institutions and historic shophouses, the roof has always carried both purpose and presence.

In a tropical climate, its role is fundamental. It manages rainfall, reduces heat, and allows buildings to breathe. Instead of being secondary decisions, these are the ones that influence how a building performs over time.

Many of Malaysia's heritage buildings continue to stand today because these decisions were made with care. Roof forms and materials were selected with a clear understanding of climate and use.

Clay roofing appears consistently across this landscape. It is familiar, often understated, but over time has proven both durable and visually enduring. This guide looks at how these roof forms developed, and how their underlying principles continue to inform architectural thinking today.



Church of St. Francis Xavier Melaka



Rooflines Shaped by Climate and Culture

Malaysia's built environment reflects a long process of adaptation to climate. Before modern construction systems became widespread, buildings were shaped by necessity, by rain, heat, and the need for ventilation.

Traditional Malay houses are often referenced for this reason. Raised on timber stilts and covered with pitched roofs, they respond directly to their surroundings. Rain is shed quickly, air moves through the structure, and shaded edges soften the impact of sun and weather.

The roof carries much of this responsibility. Its scale, pitch, and extension determine how the building performs over time.

As towns expanded and external influences arrived, these ideas were still beautifully and vernacularly adapted. In places such as George Town and Malacca, architecture evolved through a mix of local and imported traditions.

At street level, there is variation. Above it, the roofline is often the most consistent element across entire rows of buildings.

Clay-tiled roofs repeat across blocks, forming a continuous layer that connects different structures. When viewed from above, this continuity becomes more apparent, almost like a shared surface across the city.

These patterns were not designed for visual effect alone. They emerged from practical decisions that, over time, shaped the identity of each place.

Heritage Roof

Typologies in Malaysia



Traditional Malay House

Traditional Malay houses commonly use forms such as bumbung panjang and bumbung limas, both shaped by the demands of climate.

The steep pitch allows rainwater to drain quickly during monsoon seasons, while extended eaves provide shade and protect walls from exposure to rain and sunlight.

The volume beneath the roof also allows heat to rise and escape, supporting natural ventilation.



Masjid Kampung Laut, Kelantan

Masjid Kampung Laut reflects a similar approach, adapted for a different building type. Its layered roof introduces separation between levels, allowing airflow through the structure while maintaining protection from rainfall.

The form is simple, but carefully considered.

George Town Shophouses

In George Town, the roofline is less about individual buildings and more about continuity. Clay-tiled roofs repeat across rows of shophouses, creating a shared rhythm across the streetscape.

Variation sits below, while the roof brings consistency to the overall composition.



Dutch Square, Malacca

Around Dutch Square, European influences are visible, but the roofs have been adapted to suit tropical conditions. The pitch remains practical, and clay tiles continue to perform reliably over time.

These buildings have settled into their environment, both structurally and visually.





The Enduring Craft of Clay Roofing

Clay roofing has remained in use not simply because of tradition, but because it performs reliably over time.

When fired at high temperatures, clay becomes a dense, stable material capable of withstanding prolonged exposure to sun, rain, and humidity.

Its colour is inherent within the material rather than applied to the surface, allowing it to age without significant visual deterioration.

Across Malaysia, many heritage buildings still retain their original clay roofs. In these cases, the material has simply continued to perform as intended.

For architects, clay roofing quality sits somewhere between craft and practicality: familiar, durable, and dependable.



Royal Selangor Golf Club



Galeri Sultan Azlan Shah, Kuala Kangsar



Sultan Abdul Samad Building

Heritage Conservation Considerations

Working on heritage and preservation projects often requires a measured approach. In many cases, the intention is to retain the building as it is found, allowing its original character and design language to remain visible over time.

Roof restoration is one of the more visible interventions. Architects working on these projects often consider:

- retaining the original roof form and proportions, in keeping with the building's architectural language
- selecting materials that remain compatible with the existing structure
- preserving the continuity of the surrounding roofscape
- ensuring the roof continues to perform under tropical conditions

These decisions require a balance between preservation and performance, where changes are made carefully and only where necessary, without disrupting the architectural language of the building.

Clay roofing remains closely aligned with these considerations. It reflects what was originally used, while continuing to offer durability in today's environment.

Sultan Abdul Samad Building



Sultan Abdul Samad Building

Clay Roofing in Contemporary Practice

While clay roofing has been used for centuries, modern roofing systems have evolved to improve installation precision and long-term performance.

Modern clay roof systems integrate traditional clay tiles with compatible components designed to enhance durability and structural reliability.

Monier clay roof systems combine the timeless appearance of clay roofing with system-based installation solutions that support consistent roof performance.

For architects working on heritage restoration or heritage-inspired projects, this offers a way to maintain traditional roof aesthetics while meeting contemporary building requirements.

By combining traditional material heritage with modern engineering, Monier continues the legacy of clay roofing in Malaysia's architectural landscape.



Batu Gajah Hospital



Masjid At-Taqwa Mukim Beris Pak Pura, Kelantan



Hydroceric Technology

A highly durable ceramic glaze that locks in vibrant color while delivering superior self-cleaning, dirt-repelling, and anti-fungal properties.

H-Cassette Process

Engineered using individual refractory cassettes during high-temperature firing to prevent distortion, ensuring flawless dimensional accuracy and a perfect interlocking fit.

Architects working with heritage references often look for materials that sit comfortably between past and present.

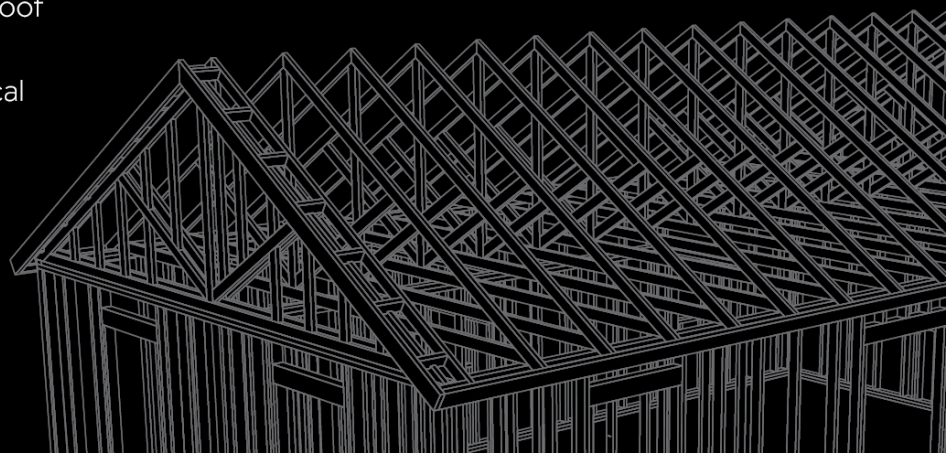
Clay roofing continues to do this naturally. Its proportions, texture, and colour align with traditional roof forms without requiring reinterpretation.

Monier clay roof systems support this approach through:

- Clay tile profiles suited to traditional roof aesthetics
- Durable materials designed for tropical environments
- System components that support long-term roof performance

- Installation standards that ensure consistency and reliability

In many cases, the material does not need to be reimagined. It simply continues to be used in a way that respects both heritage and current practice.



Supporting Heritage-Inspired Architecture



Where Will Your Roof Be in 100 Years?

Malaysia's historic roofscapes remind us that architecture is not only about the present. It is about generations to come.



Clay roofs have protected buildings across centuries, enduring climate, time, and changing cities.

For architects designing today, the question often goes beyond how a building looks upon completion

The real question is: Where will this architecture be in 100 years?

Through thoughtful design and enduring materials, architecture can continue to carry forward the legacy of Malaysia's built heritage.

Project Photos



CHINESE-MUSLIM MOSQUE, SELANGOR



PASAR BESAR KEDAI PAYANG, Kuala Terengganu



REROOFING SHOPLOT, PENANG



T.A.R. COLLEGE



PRIVATE COMMERCIAL PROPERTY, MELAKA



ST. PAUL'S CHURCH, PENANG



MASJID KAMPUNG HULU, MELAKA

MONIER



CALL US NOW

1800 88 0865



bmigroup.com/my

BMI ROOFING SYSTEMS SDN. BHD. (BRSSB) reserved the right to change the contents of this document without any prior notice. Printed: 04/2026 © BRSSB
Edition 2026 / V1



Awarded Corporate Excellence Award
at the prestigious Asia Pacific
Enterprise Awards (APEA) 2024



CERTIFIED TO: MS ISO 2095:2022



BS 476-6 & 7



Scan QR Code for
BMI Malaysia



Perakuan Pemasuhan Standard (PPS)



Member of Reflective Insulation Manufacturers
of Malaysia (RIMM)



Scan QR Code for
Showroom & Sales
office location

BMI ROOFING SYSTEMS SDN. BHD.

Registration No.197401002179 (19163-M)
(Formerly known as Monier Malaysia Sdn. Bhd.)
Suite 11.02, 11th Floor, Menara JKG,
No. 282, Jalan Raja Laut,
50350 Kuala Lumpur, Malaysia
T (+60) (3) 21760600
roofing-malaysia@bmigroup.com

ABOUT BMI GROUP

BMI Group was born out of a recognition that customers now expect a single point of expertise to help them find their ideal roof. Bringing together some of the industries most trusted brands to become the largest supplier of both flat and pitched roofing and waterproofing solutions throughout Europe, BMI Group has over 173 years of experience and innovation to offer its clients.

As a **Standard Industries** company, BMI Group, headquartered in London, has the support, reach and resources of a global enterprise. With over 120 production facilities across Europe, Africa and Asia, and more than 9,500 employees worldwide, the business is well positioned to provide an unparalleled level of service to homeowners, specifiers, contractors, property owners and developers.

Find out more at www.bmigroup.com

