

- CREAM recognised as an Approved Research Institute
- Development of Resilient Structures for Natural Disasters
- Towards ABMS Certification
- SHASSIC and QLASSIC Achievements
- Factory Visit to Mastrak Sdn Bhd

editorial team

Editor-in-chief Ir. M. Ramuseren

Managing Editor Ts. Intan Diyana Musa

Executive Editor Marlia Masran

Writers/Contributing Editors

Ts. Dr. Hj. Mohd Khairolden Ghani Ts. Syed Hazni Abd Ghani Ahmad Hazim Abdul Rahim Mohd Aizuddin Ayob Maria Zura Mohd Zain Mohammad Khairul Annam Roslan Sr. Yusrin Faiz Abd Wahab Muhamad Azam Azmai Mohd Ikhwan Abdullah Ts. Yuzairy Rozaidi Rohaizan Rohani Mokhtar Khairunnisa Kamaruzzaman





about us

Construction Research Institute of Malaysia (CREAM) was established on 26 March 2004 as a Company Limited by Guarantee (SBMJ) under the Act Company 1965. CREAM became fully operational on January 1, 2006. Establishment CREAM is to be the research arm of the Industrial Development Board Construction (CIDB) Malaysia to encourage, promote and implement activities research and development (R&D) related to the national construction industry with Section 4(c), CIDB Act 1994 (Act 520). With the ability of knowledge and existing expertise, CREAM actively cooperates with parties interested in producing research that will benefit the sector construction. At the same time, CREAM also supports the development of the industry construction in a better direction through the quality and integrity of building materials when also offers testing, evaluation and certification services to industry players. CREAM will continue to be proactive in being active and reinventing the way we in doing something, to keep giving the best to all parties and always responsive to our customers.

vision

To meet the strategic needs of Research and Development in the Malaysian construction industry. CREAM is also committed to build partnerships with the industry's stakeholders and researchers while exploring and encouraging the development of a knowledge-based industries as well as ready to meet current demands and challenging changes.



To make CREAM globally recognized as the leading institute for Research and Development (R&D) that drives quality, innovation, technology and skills towards achieving sustainability in the construction industry.





what we offer

- Research and Development
- Industry Consultancy and Engagement
- Lab Testing
- Product Certification
- Assessments QLASSIC, SHASSIC, MyCREST and Sustainable Infrastar
- Certificate of Approval
- Inspection and Sampling
- Forensic Investigation
- Technical Opinion
- Journal Publication



contents





05

NEW YEAR'S MESSAGE FROM CHIEF EXECUTIVE OFFICE

06

CREAM RECOGNISED AS APPROVED RESEARCH INSTITUTE (ARI) BY MINISTRY OF FINANCE (MOF)

07

CREAM TOWARDS OBTAINING ANTI-BRIBERY MANAGEMENT SYSTEM (ABMS) CERTIFICATION

09

INITIATIVES BY CIDB AND CREAM FOR THE DEVELOPMENT OF RESILIENT STRUCTURES FOR NATURAL DISASTERS 11

SHASSIC SCORE - THE STATISTICS

12

HIGHEST QLASSIC ACHIEVEMENTS



PAST EVENTS

18

UPCOMING EVENTS



ANNOUNCEMENTS

NEW YEAR'S MESSAGE FROM CHIEF EXECUTIVE OFFICER



As we welcome the New Year 2023, I want to take a moment to express my gratitude for your hard work and dedication. Your contributions have been instrumental in our success, and I am confident that together, we will continue to achieve even greater things in the coming year.

I am committed to supporting you and providing the resources you need to succeed in your role. My door is always open, and I encourage you to reach out if there is anything I can do to help. Let's make this year a memorable one filled with growth, innovation, and impact. I look forward to working with you to achieve our common goals.

I am thrilled to introduce the first publication of CREAM E-Magazine, which is dedicated to showcasing the achievements and initiatives of our talented team. CREAM has made great strides in recent years and I am proud of all that we have accomplished.

This first edition of CREAM E-Magazine highlights some of our key initiatives and activities. CREAM's success is a direct result of the efforts of our employees, and I am honoured to be a part of such a dynamic and talented team. I am confident that we will continue to grow and succeed in the coming years, and I am excited about the opportunities and challenges that lie ahead.

I hope you enjoy reading this edition of our E-Magazine. I would like to extend my sincerest thanks to our employees, clients, and partners for their continued support.

I wish you all a happy and prosperous new year.

Ir. M. RAMUSEREN

CREAM Recognised as Approved Research Institute by Ministry of Finance (MOF)

by Ts. Dr. Hj. Mohd Khairolden Ghani

The Construction Research Institute of Malaysia (CREAM) has received recognition as an Approved Research Institute (ARI) from the Ministry of Finance (MOF) under Section 34 (B) Income Tax Act 1967.

The recognition will be enforced from 5th July 2023 until 3rd July 2027, which benefits CREAM in research and development (R&D) works. By having this recognition, CREAM can implement Double Tax Deduction initiatives for the construction industry.

The Double Tax Deduction initiative is a business tax exemption incentive given to the industry/company granted a research project as CREAM's researcher, whereby the amount of exemption shall be twice the amount given to CREAM.

Industries can benefit from Double Tax Deduction through the following:

- Improved productivity or problemsolving via research
- Significantly reduced tax payments
- Improved cash flow
- Promotion of latest technology with cutting edge products
- Owning Intellectual Property (IP) and increased intangible assets

Thus, CREAM welcomes any construction companies/individuals to come forward and discuss further with CREAM to enjoy Tax exemption by providing Double research grants to CREAM's researchers. This initiative will definitely enhance collaboration between companies and CREAM benefits for the in mutual betterment of the construction industry.

For further details, please contact Ts. Dr. Hj. Mohd Khairolden Ghani (khairolden@cream.my)



Towards Obtaining Anti-Bribery Management System (ABMS) Certification

by Mohd Aizuddin Ayob and Mohammad Khairul Annam Roslan

The government through the Malaysian Anti-Corruption Commission (MACC) has imposed the implementation of Section 17A, MACC Act 2009, for the commercial organisation starting on 1st June 2020.

The Construction Research Institute of Malaysia (CREAM), as a commercial and business entity, is required by this new provision to take appropriate and parallel steps to ensure businesses are conducted with integrity and without corruption. Therefore, CREAM has taken the initiative to establish an Integrity and Governance Unit and gets certified with MS ISO 37001:2016 (Anti Bribery Management System) certification.

Enforcement of Section 17A, MACC Act 2009

The provision under the Section 17A MACC Act 2009 is a provision that stipulates a corporate liability principle where a commercial organisation can be considered guilty if any of its employees and/or associates commit corruption for the benefit of the organisation. The commercial organisation is also considered guilty in the or event whether not. the upper management or its representatives know about the corrupt acts committed by its employees or associates.



If a commercial organisation is found guilty under Section 17A, the penalty under Section 17A (2) is a fine of not less than 10 times the value of the bribe or RM 1 whichever million. is higher, or imprisonment for up to 20 years, or both. However, commercial organisations may be able to defend themselves if they can demonstrate that the organisation has implemented adequate procedures to prevent corruption in their operations or business activities.

Establishment of Integrity and Governance Unit

The establishment of this unit is in line with the Arahan YAB Perdana Menteri Bil. 1/2018 dated 5th October 2018 which requires setting up of an Integrity and Governance Unit for government-related companies (GLCs), companies owned by ministries and government agencies, including those under the state government. This unit is responsible for inculcating the principle of rejecting corruption, abuse of power and corruption in all work processes at CREAM through four core functions, which are:

i. Complaint Managementi. Detection and Verificationiii. Strengthening Integrityiv. Governance

Anti-Bribery Management System (ABMS)

The Anti-Bribery Management System (ABMS) is a standard that has been registered under the International Organization for Standardization (ISO) and the Malaysian Standards Department (JSM) known as MS ISO 37001:2016. This system is intended to prevent, detect, and deal with cases and the risks of corruption in CREAM.

The objectives of the implementation of ABMS in CREAM, are to:

- Ensure that CREAM staff are given courses, training and programmes related to the prevention of corruption.
- Ensure that the corruption complaint channel is open and managed efficiently and effectively, as well as guarantee the confidentiality of the complainant's information, and
- Implement continuous improvement measures in ABMS from time to time.
- Implement continuous improvement measures in ABMS from time to time.

ABMS Implementation Status

Currently, CREAM has successfully developed documents for ABMS and has appointed SIRIM QAS Sdn. Bhd. to conduct an audit session to obtain certification for MS ISO 37001:2016. CREAM has successfully faced the 1st stage audit on 17-18 January 2023 and has been recommended to be audited for the second stage. The 2nd stage audit is expected to be held at the end of June 2023.

Our Hope

The recognition of this certification can indirectly increase the productivity and level of integrity of CREAM staff in performing daily tasks. In relation to that, the implementation of the certification also opens space for CREAM's external and internal parties to channel any complaints if there is any risk of corruption during the execution of the task.



Initiatives by CIDB and CREAM for the Development of Resilient Structures for Natural Disasters

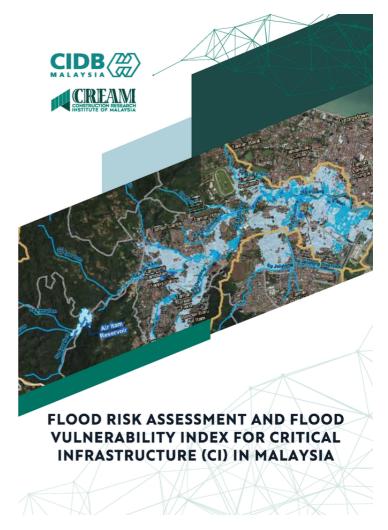
by Sr. Yusrin Faiz Abd Wahab

A highly vulnerable community is overrun by risk, which frequently results in mortality and morbidity, often caused by natural disasters. 300 natural catastrophes have struck the world annually over the previous ten years, causing millions of casualties and billions in damage. Recently, the country experienced various unprecedented events, including the worst flood event and landslide of late. In December 2021, Malaysia was devastated by record flood events in the last 100 years that affected massive areas of Klang Valley and the east coast of Malaysia.



Due to the negative impact of floods and landslides, the government has seriously taken measures to find ways to resolve and reduce the damage left by these[SHA1] catastrophes. Through research initiatives by the Construction Research Institute of Malaysia (CREAM), a subsidiary of the Construction Industry Development Board (CIDB), Guidelines for Flood Risk Assessment (FRA) and Flood Vulnerability Index (FRI) for Critical Infrastructure (CI) and Guidelines for Landslide Vulnerability Assessment and Risk Index for Critical Infrastructure (CI) were developed in 2019 and later in 2022, which were approved by the National Council for Local Government (MNKT-79).

These guidelines were established by local experts on floods comprising the National Disaster Management Agency (NADMA), Department of Irrigation and Drainage (JPS), Public Works Department (JKR), National Hydraulic Research Institute of Malaysia (NAHRIM), Universiti Teknologi Malaysia (UTM), Universiti Sains Malaysia Malaysian Meteorological (USM) Department (MET), Tenaga Nasional Berhad Research (TNBR), Ampang Jaya Municipal Council (MPAJ), Malacca City professional Council (MBMB), associations. and researchers. These guidelines comprise important criteria of vulnerability and risk, and also consider the economic and social impact from local people's perspectives.



The first such guidelines on floods and landslides focusing on Critical Infrastructure in Malaysia will serve local authorities and planners to assess using parameters set forth for floods and landslide classification for critical infrastructures. Guidelines can also be used as references by industry players in planning mitigation measures before any development in flood and landslide-prone areas commences. It is hoped that the guidelines are applied throughout the country to mitigate loss from flood and landslide disasters in the future.

Visit www.cream.my for more info.

SHASSIC Scores - The Statistics



Safety and Health Assessment System in Construction or SHASSIC is an independent assessment tool to assess the safety and health at the work site in the construction projects based on Construction Industry Standard (CIS 10:2022 Safety and Health Assessment System in Construction (SHASSIC)).

The assessment shall cover 25% to 75% of a project's physical progress and shall inclusive of construction planning stage and construction stage.



STATISTIC OF SHASSIC SCORE YEAR 2021 \checkmark 30 \checkmark 18 \checkmark 4 \checkmark 7 \checkmark 1

STATISTIC OF SHASSIC SCORE YEAR 2022	
$\star \star \star \star \star$	57
$\star \star \star \star$	27
$\star \star \star$	14
**	3
\star	3

Highest QLASSIC Achievements



Quality Assessment System in Construction (QLASSIC) is an independent assessment tool to measure and evaluate the workmanship quality of a building construction works based on Construction Industry Standard (CIS 7:2021 Quality Assessment System for Building Construction Works).

QLASSIC enables the quality of workmanship in that particular project to be objectively measured through a scoring system.



CREAM would like to congratulate the following project teams to the highest achievements for QLASSIC assessments for the year 2021 and 2022. Congratulations!

2021

Project Name:

Sunway City (JB) Sdn Bhd/Bukit Lenang/Phase 1A Cadangan Pembangunan 110 Unit Pemajuan Holiday Home Perumahan Strata Fasa 1B, yang Mengandungi:Fasa 1 (Parcel A):, 1) Rumah Berkembar 3 Tingkat Jenis D1 (40'x80') = 34 Unit, 2) Rumah Banglo 3 Tingkat Jenis D1 (50'x90') = 2 Unit Fasa 1 (Parcel B):1) Rumah Berkembar 3 Tingkat Jenis D1 (40' X 80') = 32 Unit, 2) Stesen TNB = 2 Unit3) Rumah Sampah = 1 Unit di atas Sebahagian Lot PTD 231844, Jalan Persiaran Bumi Hijau, Mukim Plentong, Daerah

Developer:

Contractor:

Sunway City (JB) Sdn. Bhd. Inta Bina Sdn. Bhd.

QLASSIC Score:

90%



Project Name:

Proposed Main Building Works (Phase 3) for Cadangan Membina 361 Unit Rumah Teres, Rumah Kluster, dan Rumah Bandar yang Mengandungi: Fasa 1: I. 87 Unit Rumah Teres 2 Tingkat Jenis A, II. 40 Unit Rumah Bandar 3 Tingkat Jenis E, III. 1 Unit Pusat Komuniti 1 Tingkat Beserta 1 Unit Pencawang Elektrik, IV. 1 Unit Rumah Sampah, V. 1 Unit Pondok Pengawal, VI. 3 Unit Pencawang Elektrik Fasa: VII. 48 Unit Rumah Teres 2 Tingkat Jenis A, VIII. 28 Unit Rumah Kluster 2 Tingkat Jenis C, IX. 30 Unit Rumah Bandar 3 Tingkat Jenis E, Fasa 3: X. 64 Unit Rumah Teres 2 Tingkat Jenis B, XI. 64 Unit Rumah Kluster 2 Tingkat Jenis D, di atas PTD 200677, Mukim Pulai, Daerah Johor Bahru, Johor Darul Takzim

Developer:

Contractor:

Sunway Iskandar Sdn. Bhd.

Kalsari Jaya Sdn. Bhd.

QLASSIC Score:

90%

Past Events

Value Management Professional Training (Module 1) 9-11 January 2023



The 3-day training was attended by CREAM employees who aimed to learn the concept of Value Management (VM), a systematic and innovative methodology to achieve better value and cost optimization for projects, products, facilities, systems, and services. The training was conducted for participants to learn about VM job plans, tools, and techniques applied in conducting a VM Study.

This training was also to improve understanding of CREAM staff on VM Studies, which have been successfully applied in Affordable Housing Programmes and Projects using CIDB Standard Design in obtaining commercial value for designs and projects in the future.

Chief Executive Officer Mandate & Birthday Celebration 11 January 2023



CREAM Webinar Series 2023

Development of Resilient Structures for Natural Disasters



Session 1: Lessons and Innovations for Improving Flood Resilient Construction 19 January 2023

Speakers:

- Dr. Nor Eliza Alias Senior Lecturer, Universiti Teknologi Malaysia (UTM)
- Ir Hjh Bibi Zarina Che Omar Former Deputy Director General (Specialist Sector), Department of Irrigation & Drainage Malaysia

No of participants: 101

Session 2: Mapping the Future of Landslide Risk Analysis in Malaysia

26 January 2023 Speakers:

- Dato' Zakaria Mohamad. P.Geol, Chairman, Geomapping Technology Sdn Bhd
- Dato' Paduka Ir Dr Che Hassandi Abdullah Former Senior Director, CREaTE JKR

No of participants: 91

Factory Visit to Mastrak Sdn Bhd by Ts. Yuzairy Rozaidi Rohaizan and Rohani Mokhtar



On 19th Jan 2023, CREAM was invited to visit Mastrak Sdn Bhd fabrication yard and office located in Batang Benar, Negeri Sembilan. The CREAM delegation was led by CEO, Ir M Ramuseren, and greeted by Mastrak Sdn Bhd's General Manager, Mr Ekhwan Rusli.

Mastrak Sdn Bhd is a local company and one of the key producers of reinforced concrete sleepers, bearers and slabs for Malaysia's railway industry. Established in 1982, Mastrak Sdn Bhd has produced more than 2 million concrete sleepers and bearers and has been involved in various projects locally and abroad such as KTM, LRT, MRT and Sabah State Railways. Overall, they have contributed to almost 1,800 km of Malaysian rail networks and continue to produce more.

Currently, MKRM can conduct tests on railway sleepers to meet the requirements of BS EN 13230, namely static bending testing, positive and negative moment, rail seat, and dynamic load test. CREAM is also in the midst of getting accreditation for all relevant test scopes to ensure the acceptance of the test reports produced can meet the requirements of the standard.

Potential collaboration and future cooperation between CREAM and Mastrak was also discussed at length during this visit. CREAM through Makmal Kerja Raya Malaysia is embarking on a new phase to enhance its testing capacity by providing services to test rail products, namely concrete sleepers and bearers. As a producer of rail sleepers and bearers, Mastrak shall benefit greatly from this collaboration and the availability of a local testing laboratory and certification body at CREAM.

For more info on testing services available at MKRM, kindly browse our website at www.cream.my.





Upcoming Events

CREAM Webinar Series 2023

Safety and Quality Practices in Construction Industry



Session 1: Best Quality Practices in Construction: Doing It Right the First Time

22 Feb | 9AM - 12pm

Session 2: Strengthening and Promoting Safety and Health in Construction

23 Feb | 9AM - 12PM

For more info:

marketing@cream.my

⊕ www.cream.my 🔇 +603 2779 1479 😝 🍤 🙆 🗗 creamcidb

Construction Research Institute of Malaysia

The 1st Digital Construction Summit 2023 14–15 March 2023



For sponsorship and exhibition opportunities, please contact us at dcs2022@cream.my



🖸 in Construction Research Institute of Malaysia

19 January 2023

Makmal Kerja Raya Malaysia (MKRM) has been awarded the ISO/IEC/ 17025:2017 accreditation for more new scopes from Department of Standards Malaysia.

This accreditation ensures that our laboratory meets both technical competence and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations.

Congratulations team!

1 January 2023

mkrm@cream.my

CREAM is proud and thrilled to announce that we are officially recognised by the Ministry of Finance (MoF) as Approved Research Institute under Section 34(B) of the Income Tax Act 1967.

With this status, any person/company that makes a contribution/payment to CREAM is eligible for a double tax deduction. Double tax deduction is applicable for the following expenditure.

- Cash contribution for research activities
- Payment for the use of research services

CREAM CONSTRUCTION RESEARCH

SPECIAL ANNOUNCEMENT

Construction Research Institute of Malaysia (CREAM) is proud to announce that we are officially recognised by the Ministry of Finance (MoF) as Approved Research Institute

under Section 34(B) of the Income Tax Act 1967

ote: Surat Kelulusan Kementerian Kewangan : MOF.TAX(S)700-3/1/829 (6) bertarikh 8 November 2022



Announcements

1 January 2023

CIDB is committed to bringing only the best and highest quality products in the construction industry.

CREAM as the Construction Assessment Center (CASC) will carry out all assessments with the highest integrity and provide the best services to our clients.

To stay committed to these values that lie at the core of our organisation, we have reviewed our prices, yet being competitive, as of 1st January 2023. This will make sure we can choose the most reliable assessors and upkeep the quality as well as the reliability of the offered product.





Assessment Fee (effective 1st January 2023)

RM2,350.00

Scan for brochure For more info: ▲ casc@cream.my



Connect with us

1 January 2023

CIDB is committed to bringing only the best and highest quality products in the construction industry.

CREAM as the Construction Assessment Center (CASC) will carry out all assessments with the highest integrity and provide the best services to our clients.

To stay committed to these values that lie at the core of our organisation, we have reviewed our prices, yet being competitive, as of 1st January 2023. This will make sure we can choose the most reliable assessors and upkeep the quality as well as the reliability of the offered product.

