ISSUE 15: JULY - SEPT 2024



# CREAM

e-magazine



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- ICON UMS Visits MKRM Sabah: A Promising Collaboration for R&D in Construction Materials
- CREAM and RTTC-TISTR Strengthen Collaboration with Train Weight Device Demonstration at KTMB Ipoh Station
- CREAM Participates in CIDB OSH Week to Promote a Culture of Safety
- Construction 4.0 A Guide for Digital Transformation
- Contractor's Quality Management System: A Path to Quality Construction
- List of CQMS Certified Contractors
- QLASSIC, SHASSIC, MyCREST and CQMS Statistics
- July September 2024 Activities Highlights









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## 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 of CREAM is to be the research arm of the Construction Industry Development Board (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 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.

## mission

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.





# 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
- Contractor's Quality
   Management System (CQMS)
- Forensic Investigation
- Technical Opinion
- Journal Publication



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# ICON UMS Visits MKRM Sabah: A Promising Collaboration for R&D in Construction Materials







by Ahmad Hazim Abdul Rahim, Nor Azila Maulihasan and Hassanain Hafiz Mohd Asnan



On 26th July 2024, the Intelligent Construction Research Group (ICON) from Universiti Malaysia Sabah (UMS) visited CREAM MKRM Sabah. Established in May 2024 under the Faculty of Engineering, UMS, ICON's main objective is to foster quality research among researchers and students through a multidisciplinary approach. The group also aims to strengthen relationships with industries, professional bodies, social organizations, and the government.

The UMS delegation was led by Ts. Dr. Ahmad Nurfaidhi Rizalman, an expert in Construction Materials, Numerical Simulation, and Statistical Modelling. Other members of the group included Ir. Ts. Dr. Noor Sheena Herayani Harti, Dr. Hidayati Asrah, Dr. Siti Jahara Matlan, Dr. Andrew Lim Chung Han, and Dr. Sheikh Mohd Iqbal Bin S. Zainal Abidin. Each team member brings unique expertise to the group, contributing to ICON's mission.



#### **HIGHLIGHTS**

During the visit, the ICON team received a comprehensive briefing on the testing services available at CREAM MKRM Sabah. This collaboration presents significant opportunities for UMS engineering students, who can access these state-of-the-art facilities for their final year projects. CREAM MKRM Sabah also identified potential areas for future collaboration, particularly in the testing of construction materials—a key component in research and development (R&D) processes.

CREAM MKRM Sabah remains committed to providing top-notch services to industry players, researchers, and students alike. Through collaborations like this, we can further the objectives of establishing MKRM in the Land Below the Wind.









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# CREAM and RTTC-TISTR Strengthen Collaboration with Train Weight Device Demonstration at KTMB Ipoh Station

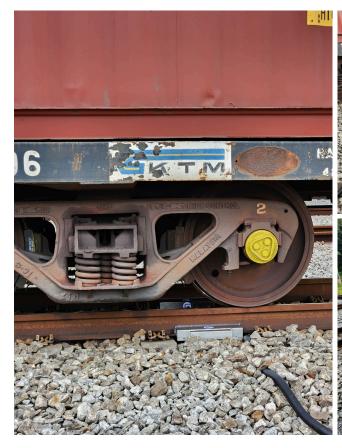




by Ahmad Hazim Abdul Rahim & Tc. Mohd Azizi Arshad

The ongoing collaboration between the Construction Research Institute of Malaysia (CREAM) and the Railway Transportation System Testing Centre (RTTC-TISTR) was marked by another significant event held on 20-21 August 2024. This event was made possible with substantial support from Keretapi Tanah Melayu Berhad (KTMB), who provided an ideal site for the study. It follows the technical seminar on "Technical Cooperation for Research & Development and Implementation of Railway Inspection and Monitoring Technology," hosted by RTTC-TISTR in Bangkok in June 2024, as reported in CREAM's E-Magazine Issue 14.

The installation and demonstration of the Train Weight Device (TWD), developed by RTTC-TISTR, took place at KTM Ipoh Station on an active KTMB cargo train line. The event was led by Dr. Anat Hasap, Director of RTTC-TISTR, and his team of technical officers. KTMB's technical and engineering team, led by Chief Technical Officer (CTO) Ir. Ahmad Nizam Mohamed Amin, also participated, along with representatives from CREAM, including MKRM Manager Ahmad Hazim Abdul Rahim and Assistant Engineer Mohd Azizi Arshad.











The TWD offers significant advantages to train operators like KTMB by providing essential data such as gross weight, weight distribution, and speed measurements of actual passing rolling stock. A typical cargo train may consist of up to 50 wagons, with each wagon potentially carrying up to 60 tons. Currently, the weight of the cargo in each wagon is typically declared by the user or client. However, the TWD delivers precise weight data, helping **KTMB** identify discrepancies declared weights while ensuring the safety of rail infrastructure and overall operations.

A complete TWD system includes sensors with four wire strain gauges, installed at four different points on the track and connected to a data controller. The TWD was left to record data overnight as cargo trains passed through. The collected data is stored in a cloud storage system for easy retrieval and security. The recorded data is then analyzed by software, and the results are compiled into a final report issued to the operator.

This project is funded by the United Nations Development Programme (UNDP) through the Perez-Guerrero Trust Fund for South-South Cooperation (PGTF). CREAM is proud to collaborate with RTTC-TISTR and KTMB on this research initiative, which is expected to bring significant benefits to Malaysia's rail industry. This collaboration aligns with the key areas of cooperation outlined in the Memorandum of Understanding (MoU), specifically in research and development in rail transportation, focusing on inspection and monitoring technologies.

### HIGHLIGHTS

On behalf of CREAM, we express our sincere gratitude to RTTC-TISTR and KTMB for including us in this important program.



# **CREAM Participates in CIDB OSH Week to Promote a Culture of Safety**



by Nuramin Baslan

The Occupational Safety and Health Committee (JKKP) under the Construction Industry Development Board Malaysia (CIDB) successfully organized the Occupational Safety and Health (OSH) Week from September 10 to 12, 2024. The event gathered CIDB staff and subsidiaries under one roof at CIDB520 The Met Corporate Towers. Dedicated to fostering a culture of safety and health in the workplace, the program was specifically designed for CIDB employees and its subsidiaries. It featured engaging sessions, interactive exhibitions, and networking opportunities, all aimed at equipping organizations with the necessary tools and insights to improve safety protocols.

Held in line with the government's directive through the Ministry of Works (MOW) and the Malaysian National Agenda Campaign (ANMS), September has been designated as National Health Month, requiring all government agencies, including CIDB, to carry out health-related activities. This year, the event's theme aligned with the World Health Organization's (WHO) initiative, and the chosen theme, "My Health, My Right," sought to raise awareness about the role each individual plays in promoting accident prevention through positive intervention with tact and courtesy.

According to the CIDB JKKP Committee, the primary goal of OSH Week Madani 2024 was to promote occupational safety and health (OSH) as a critical agenda across the CIDB community. The event aimed to foster greater sensitivity toward safety and health not only in the workplace but also at home and in everyday life. The committee expressed hope that OSH Week Madani 2024 would instill a lasting culture of safety within CIDB and its subsidiaries, supporting the organization's goal of achieving excellence in workplace safety and health.



Representing the Construction of Research Institute Malaysia (CREAM), En. Nuramin Baslan and Mohammad Khairul Roslan, who serve as Safety Marshals under the Emergency Response Team (ERT) at CIDB520 The Met Corporate Towers, were appointed by the JKKP CIDB Committee as health sports organizers, moderators, and coordinators throughout the program.

#### **HIGHLIGHTS**

OSH Week Madani 2024 featured three main categories of activities, including safety and health talks, a blood donation campaign, and exhibitions.

The talks were delivered by external agencies on various health topics:

- 1. Kenali Ubat Anda by the National Pharmaceutical Regulatory Agency
- 2. Strok, Punca dan Rawatan / Menopause & Jantung Anda
- 3. Mengurus Kesihatan Mental, Personaliti Narsisistik
- 4. Taklimat Penerangan Takaful Cuepacs (Skim Simpanan dan Kesihatan)

#### Health screenings offered included:

- 1. Basic medical check-up
- 2. Reflexology and physiotherapy
- 3. Mammograms

#### Additional activities included:

- 1. Exhibitions
- 2. Preloved sales
- 3. Treasure hunt Fun Sports
- 4. Health sports, including circuit training by Anytime Fitness
- 5. PTK Runway
- 6. Health screenings by the School of Nursing
- 7. Kenali Ubat Anda by the School of Pharmacy
- 8. Blood donation Pusat Darah Negara
- 9. Health screening & counseling sessions









### HIGHLIGHTS





## OSH Week Madani 2024

10 - 12 September 2024









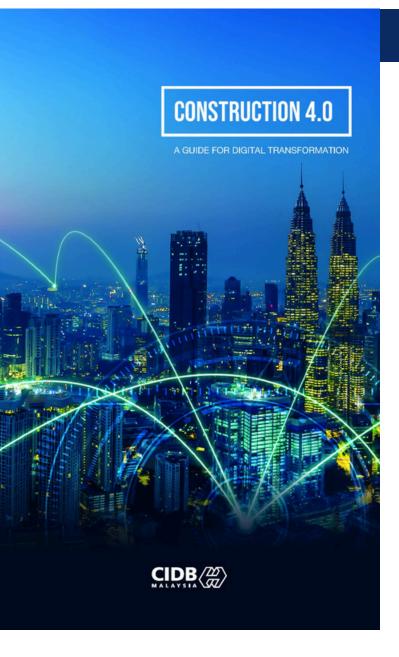






## **Construction 4.0 - A Guide for Digital Transformation**

Published by Construction Industry Development Board Malaysia (CIDB)



### **OBJECTIVES**



A framework for comprehending and executing Construction 4.0 in the Malaysian Construction Industry



The primary source for the CIS 18: Manual for IBS Content Scoring System (IBS Score)



Solutions to enhance productivity and technology adoption to achieve a favourable IBS Score.



Set the principles that provide direction to support the implementation of Industrialised Building System (IBS) in construction projects.

Ultimately, this guide is **the central pillar** in our mission to shape competitiveness among stakeholders and game changers in the construction industry's landscape.



### **SIGNIFICANCE:**

### **01** Industry Education

An educational tool that demystifies C4.0 technology and facilitates its adoption and implementation.

## **02** Familirising with Available Technologies

Emphasises the significance of comprehending the various technologies in C4.0 and their benefits.

## **03** Enhancement of Efficiency and Effectiveness

Explains how C4.0 integrates various digital technologies and procedures to enhance the efficiency and effectiveness of construction projects.

### **04** Successful Implementation of C4.0

With this guide, the Malaysian construction industry can successfully implement C4.0 and reap its numerous benefits.

### **GET YOUR COPY**



Scan the QR code and get your copy of **Construction 4.0: A Guide for Digital Transformation** 

## Contractor's Quality Management System: A Path to Quality Construction





by Ts. Intan Diyana Musa and Ts. Syed Hazni Abd Gani

The Contractor's Quality Management System (CQMS) is a structured approach designed to ensure quality in construction projects. It encompasses various processes, standards, and protocols that contractors must follow to deliver projects that meet the required quality benchmarks.

Currently, CQMS certification is already recognized by CIDB Malaysia for SCORE/MCORE assessment, focusing on elevating the quality management system among contractors in Malaysia.

#### What is CQMS?

Contractor's Quality Management System (CQMS) is an independent system to evaluate the implementation of quality management system for contractor based on the requirements of CIS 29. CQMS presents itself as a cost-effective and efficient alternative to ISO 9001, offering a streamlined approach to quality management certification. This innovative system is tailored specifically for Malaysian contractors, and it promises affordability, efficiency, and convenience.



#### **Key Stakeholders Involved in CQMS**

**Contractors** 

Responsible for implementing CQMS throughout their operations.

**Project Managers** 

Oversee CQMS execution and ensure compliance with quality objectives.

**Supervisors** 

Ensure on-ground adherence to quality protocols.

**Regulatory Bodies** 

Monitor compliance with construction standards.

Clients

Benefit from improved project quality and assurance.

### **Key Benefits of CQMS**



Enhances project efficiency by establishing standardized procedures.



Minimizes defects and errors, reducing rework and associated costs.



Improves client satisfaction through the consistent delivery of quality projects.

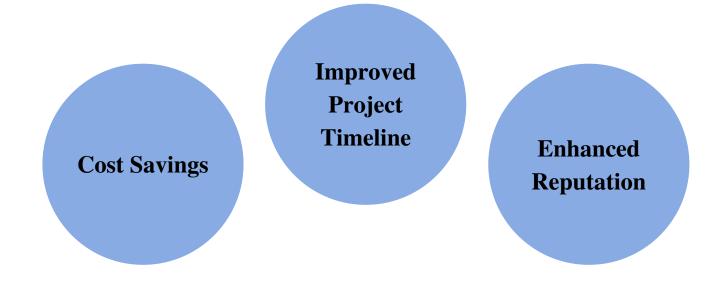


Ensures compliance with regulatory requirements, reducing legal risks.



Encourages continual improvement and innovation within construction practices.

### **Advantages of CQMS**





#### Enhancement of SCORE for G2 - G7

SCORE or SME Competitiveness Rating for Enhancement introduced by the CIDB Malaysia in collaboration with SME Corp aims to measure the capability and capacity of local and foreign contractors in Malaysia to enhance the image of the construction industry in line with the Construction Industry Transformation Programme (CITP) 2016-2020, which aligns with the pillar of 'Enhancing Quality, Safety, and Professionalism of the Construction Industry'.

SCORE-CIDB is implemented for local contractors through the analysis of responses provided by contractors based on seven established parameters. These seven parameters are:

- i. Business Performance
- ii. Financial Capability
- iii. Technical Capability
- iv. Project Management
- v. Procurement Management
- vi. Best Practices
- vii. Management Capability

It provides a standardized mechanism for grading contractor performance, thereby ensuring that only those who meet the set benchmarks can continue to work on projects, especially government and public-sector construction contracts.

Starting from 1st July 2024, the use of SCORE has been enforced for G2 - G7 grade contractors as one of the requirements for the renewal of the Contractor Registration Certificate (PPK) by CIDB Malaysia. This system is integral to the CQMS and ensures that contractors meet industry-specific standards and performance criteria. The enforcement of SCORE for G2–G7 contractors is part of CIDB's initiative to promote quality management and sustainability in construction.

#### **Benefits of SCORE Enforcement:**

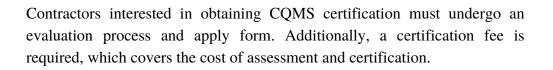
- Ensures that contractors maintain high quality in construction projects.
- 2 Encourages adherence to best practices in sustainability and safety.
- Provides a competitive edge for contractors by improving their SCORE rating, making them more attractive for high-value projects.
- Increases accountability and transparency in the contractor selection process.

Contractors who fail to meet the required SCORE benchmarks may face consequences such as losing eligibility for tenders or having their certification revoked. As a result, G2–G7 contractors are highly encouraged to integrate CQMS and align their practices with SCORE requirements to ensure compliance and enhance their standing within the industry.

#### **CQMS Certification**

To implement CQMS effectively, contractors may need to go through a certification process that verifies their adherence to quality management standards. This certification ensures that contractors meet industry requirements, which can be beneficial for winning contracts and enhancing credibility.

It comprises two main scopes, namely general management requirements and construction management requirements, which emphasize the processes and procedures for implementing a quality management system.







For more information, please email to syed@cream.my or scan the QR code.

# **CQMS Certified Contractors**

CREAM proudly congratulates the following contractors for being among the first to achieve CQMS certification!



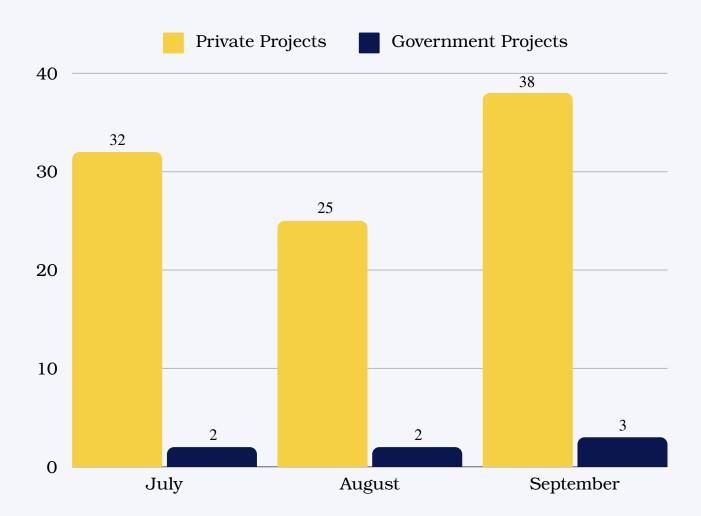
- 1. Nadi Cergas Sdn Bhd
- 2. Dasacon Sdn Bhd
- 3. Aw Engineering and Construction Sdn Bhd
- 4. Damaikon Sdn Bhd
- 5. Barrow Aluminium Sdn Bhd
- 6. Hal Empire Sdn Bhd
- 7. Ahaz Builders Sdn Bhd
- 8. Wira Jaya Electrical and Trading Sdn Bhd
- 9. Ewanz Gemilang Sdn Bhd
- 10. Ingmec Sdn Bhd
- 11. Be Rich Resources
- 12. Effendy Kway Abdullah
- 13. Shikra Suria Construction Sdn Bhd
- 14. EWT Power Sdn Berhad
- 15. ETP Synergy Sdn Bhd
- 16. Aetna Holdings Sdn Bhd
- 17. EPE Power Corporation Sdn Bhd
- 18.ETS Projek Sdn Bhd
- 19. Erwan Bhd
- 20. IGP Power Sdn Bhd
- 21. Linsun Engineering Sdn Bhd
- 22.LLC Victory Sdn Bhd
- 23. Nescaya Samudra Sdn Bhd



More info on CQMS:



## QLASSIC Assessments (July 2024 - September 2024)

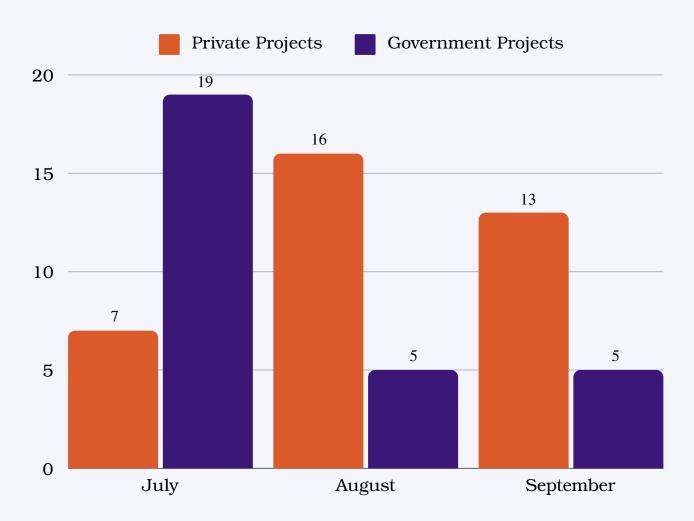




More info on QLASSIC:



## SHASSIC Assessments (July 2024 - September 2024)

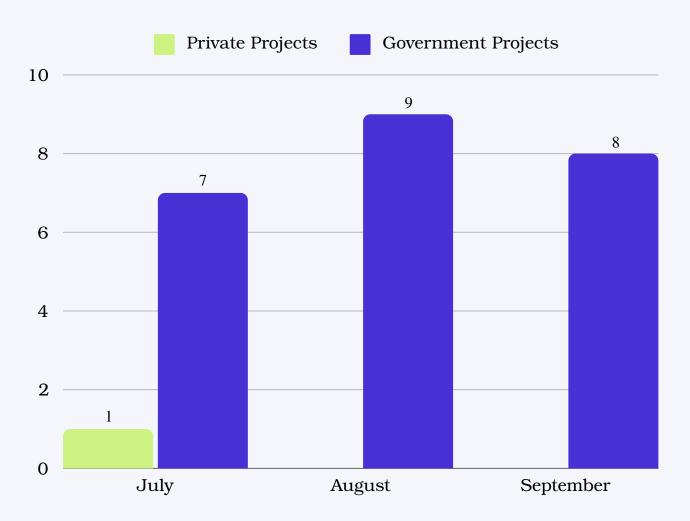




More info on SHASSIC:



## MyCREST Assessments (July 2024 - September 2024)





More info on MyCREST:



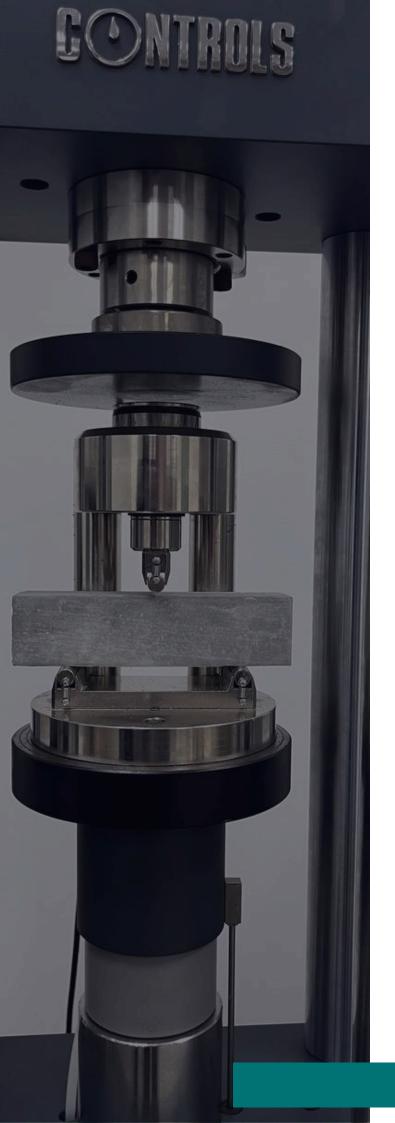
## **Current Statistics of CQMS Certification Program**

(As of October 2024)

<b>Total Application</b>	83	Ongoing Document Review	2
CQMS Certified Contractors	23	Ongoing Workplace Audit	7
Ongoing Training	13	Total Certification Targeted by end of 2024	60



More info on CQMS:



## Engagement Strategies on Implementation Of The TVET Students and Construction Personnel For Training Skills Program Organized By CIDB Malaysia

Date: 11 - 15 July 2024

Venue : Kota Kinabalu, Sabah







Technical and Vocational Education and Training (TVET) plays a vital role not only in developing local skilled manpower but also as a driving force for national development. However, TVET is often mistakenly perceived as a last-resort option for continuing education. To fulfill the nation's ambition of advancing along the value chain and becoming a high-income economy, Malaysia must increase TVET enrollment and enhance the overall quality of training. Failure to make these changes promptly may render the country globally uncompetitive, causing it to lag behind.

One of CIDB's key initiatives to harness the potential of the local workforce, reduce dependency on foreign labor, and improve the skills of existing construction workers is the establishment of six Akademi Binaan Malaysia (ABM) centers and seven CIDB Technologies Sdn. Bhd. (CIDB Tech) branches. The Skills Competency Training Program (LKK) is offered at both ABM and CIDB Tech to provide essential skills training for youth and qualified construction personnel.

To address the challenges facing the LKK program, CIDB needs a comprehensive study to assess the program's effectiveness. This evaluation is crucial for ensuring CIDB can direct funding to initiatives that will contribute to the development of Malaysia's construction industry while supporting the objectives of the Ministry of Works (KKR) and CIDB in cultivating a highly skilled local workforce.

From July 11 to 15, 2024, CREAM engaged with Akademi Binaan Sabah (ABM), CIDB Tech Sabah, Polytechnic Kota Kinabalu, and Institut Latihan Perindustrian Kota Kinabalu. The study aimed to evaluate the effectiveness of the management and implementation of the youth skills competency training program, as well as the training provided to existing construction personnel at ABM and CIDB Tech. This study is aligned with the goals of the Construction Strategic Plan 4.0, which calls for increasing the number of local skilled workers.

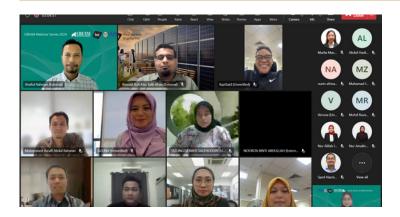
CREAM received valuable feedback during these visits and identified several key issues, along with suggestions for improvement. We hope the results of this study can serve as a strategic platform for the development of TVET in Malaysia, in line with the goals of Madani TVET, which aims to:

- 1. Create sustainable competitiveness through resilience and excellence,
- 2. Foster a culture of lifelong learning and continuous skills improvement,
- 3. Develop a sustainable and up-to-date learning ecosystem at all levels, and
- 4. Produce holistic TVET-skilled workers to meet market demand

#### **CREAM Webinar Series 2024**

CREAM Webinar Series 2024 is a monthly program organised by CREAM and it is a part of our efforts to initiate conversations on issues, challenges, opportunities and initiatives for the construction industry and beyond.

The theme for this month's webinar is "Understanding Greenhouse Gas Emissions in Construction Industry"





#### Understanding Greenhouse Gas Emissions in Construction Industry.

11 July 2024

#### Speakers:

- Mr. Shaiful Rahman
   Senior Lead Auditor Sustainability, BSI Services Malaysia Sdn Bhd
- Mr. Ahmad Rufi
   Client Manager- Sustainability, BSI Services Malaysia Sdn Bhd

No of participants : 50 pax

Sustainable Construction: The Next Level Symposium

Date: 31 July 2024

Venue: JW Marriott Hotel Kuala Lumpur





On July 31, The Edge Malaysia and YTL Cement hosted the Sustainable Construction: The Next Level Symposium at the JW Marriott Hotel, Kuala Lumpur. The event provided an opportunity to share knowledge and best practices in sustainable construction. CREAM was represented by Ir. Ts. Dr. Hj Mohd Khairolden Ghani and Ts. Intan Diyana Musa.

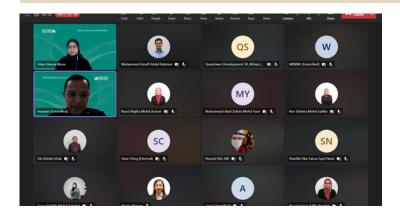
With the theme "Sustainable Construction Tomorrow: Milestones & Opportunities," this by-invitation-only event was attended by over 300 industry stakeholders, including C-suite executives and directors of property development and construction companies, as well as representatives from related associations.

The symposium featured speakers such as Dr. Yang Sung-Min, Associate Principal/Urban Designer at SAMOO Architects & Engineers from South Korea, Datuk Ho Hon Sang, President of the Real Estate Housing Developers Association (REHDA) Malaysia, and Datuk Sr. Mohd Zaid Zakaria, Chief Executive of the Construction Industry Development Board (CIDB) Malaysia.

The second half of the event included a panel discussion titled "Sustainability: Now and Beyond," moderated by The Edge Malaysia's Editor Emeritus, Ms. Au Foong Yee. Panel speakers included YTL Cement's Head of Sustainability, Ms. Clarisse Loh, CEO of PNB Merdeka Ventures Sdn Bhd, Tengku Datuk Ab Aziz Tengku Mahmud, and Seah Chee Huang, CEO of DP Architects from Singapore.

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#### Integriti dan Kesalahan Rasuah Bersama Suruhanjaya Pencegahan Rasuah Malaysia (SPRM)

1st August 2024

Speakers:

Mr. Mazwan bin Mail
 Penolong Penguasa, Suruhanjaya Pencegahan Rasuah Malaysia (SPRM)

No of participants: 136 pax

#### CIDB Sabah Delegation and Subsidiaries Meet CIDB Board Member, Dato Rolland Chia Ming Shen

Date: 6 August 2024

Venue: Pejabat Menteri & Pembantu Menteri, Sabah

On August 6, 2024, CIDB Sabah invited CREAM MKRM Sabah to participate in a delegation meeting with the newly appointed CIDB Board Member, Dato Rolland Chia Ming Shen. This delegation, which included representatives from CIDB's subsidiaries, aimed to discuss and address various issues within the Sabah construction industry. Puan Azila represented CREAM MKRM Sabah during this meeting, which served as a platform for discussion and an opportunity to express appreciation for Dato Rolland Chia's recent appointment.

The Sabah construction sector currently experiencing significant activity and is expected to become even more robust with the upcoming phase of the Pan Borneo Highway project. This infrastructure initiative is anticipated to substantial economic growth and development in the region. The discussions held during the delegation were crucial in ensuring that the industry is wellprepared to meet the challenges and opportunities that lie ahead.



Additionally, the input from this meeting aimed to amplify the voices of industry players, ensuring that CIDB Sabah and its subsidiaries can continuously provide excellent and relevant services. By incorporating feedback from various stakeholders, CIDB seeks to enhance its support for the construction industry, fostering an environment of continuous improvement and innovation.

At CREAM MKRM Sabah, we extend our heartfelt congratulations to Dato Rolland Chia Ming Shen on his appointment as a CIDB Board Member. We are confident that his leadership and vision will bring significant positive changes to the construction industry in Sabah.





#### Pameran Simposium Kejuruteraan Awam dan Struktur (SiKAS 2024)

Date: 6 & 7 August 2024

Venue : Berjaya Times Square Hotel Kuala Lumpur





The Simposium Kejuruteraan Awam dan Struktur (SiKAS 2024), held from August 6th to 7th at Berjaya Times Square Hotel, Kuala Lumpur, brought together industry professionals, engineers, and researchers from across Malaysia. This prestigious event served as a vital platform for knowledge sharing and networking within the civil and structural engineering sectors, focusing on innovation, sustainability, and infrastructure resilience.

The symposium was officially launched by the Minister of Works, YB Dato' Sri Alexander Nanta Linggi, who emphasized the critical role civil and structural engineers play in driving national infrastructure development. Ir. M. Ramuseren, Chief Executive Officer (CEO) of CREAM, was present during the official launch of SiKAS 2024.





CIDB Malaysia was one of the key exhibitors at the event, showcasing its latest initiatives and innovations aimed at advancing the construction industry. CIDB's subsidiary, the Construction Research Institute of Malaysia (CREAM), also contributed significantly to the event's exhibitions. The Minister of Works made a special visit to the CIDB booth, where he was briefed on the organization's latest initiatives.

The symposium left a lasting impact, with attendees gaining fresh insights and forming valuable connections that will propel the industry forward in the years to come.

#### **CREAM Webingr Series 2024**

CREAM Webinar Series 2024 is a monthly program organised by CREAM and it is a part of our efforts to initiate conversations on issues, challenges, opportunities and initiatives for the construction industry and beyond.

The theme for this month's webinar is "Impak Pindaan Pada OSHA 2022 dan Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan 2024 kepada Industri Pembinaan (OSHCIM/CDM)"





#### Session 1: Pindaan Kepada Akta Keselamatan dan Kesihatan Pekerjaan 1994 (OSHA)

21 August 2024

#### Speakers:

Ir. Ts. Dr. Hj. Mohd Fairuz Ab Rahman
 Timb. Pengarah, Bahagian Keselamatan Tapak Bina
 Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) Malaysia

No of participants: 80 pax

## Session 2: Peraturan -Peraturan Keselamatan dan Kesihatan Pekerjaan (Kerja Pembinaan) (Reka Bentuk) 2024 di Industri Pembinaan

22 August 2024

#### Speakers:

- Ir. Ts. Dr. Hj. Mohd Fairuz Ab Rahman
   Timb. Pengarah, Bahagian Keselamatan Tapak Bina
   Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) Malaysia
- Dr. Mohd Syamir bin Senin
   Penolong Pengarah, Bahagian Keselamatan Tapak Bina
   Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) Malaysia

No of participants: 88 pax

#### Site Visit for QLASSIC Assessment

: 20 August 2024

Venue: Banting Hospital, Selangor and Surau Al Muhsineen, Setia Alam, Selangor

The Construction Research Institute of Malaysia (CREAM) and CIDB Malaysia are currently conducting a study on the analysis of building defects identified through the QLASSIC score for government projects in the building category valued at RM 10 million and above, covering the period from 2017 to September 2024. The study aims to analyze and identify major and minor building defects in these government projects, as assessed through the QLASSIC evaluation based on CIS 7:2021. The findings from this study will be utilized to improve future versions of CIS 7.

The CREAM research team conducted two site visits to selected projects under the non-residential building category (categories C and D). The site visit to the Banting Hospital project falls under category D (Public/Commercial/Industrial Building-With Centralized Cooling System (CCS)), while the visit to the Surau and Kindergarten project is categorized as category C (Public/Commercial/Industrial Building-Without Centralized Cooling System (CCS)).

These visits aimed to provide a visual report of potential minor and major defects at the two project sites. Overall, the visits were successful in achieving their objectives.









#### **IJM Sustainable Construction Forum**

Date: 21 August 2024

Venue: Connexion Conference & Event Centre (CCEC). Bangsar South

On August 21, Ir. Ts. Dr. Hj Mohd Khairolden was invited as a panellist at the Sustainable Construction Forum 2024, hosted by IJM Industry, with the theme "Green Horizon: Advancing Sustainable Construction." The event had an impressive turnout, with approximately 250 attendees, including guests, speakers, stakeholders, government agencies, and industry experts.

The opening keynote was delivered by Datuk Ir. Ahmad Asri Bin Abdul Hamid, Independent Non-Executive Director of IJM Corporation Berhad. He emphasized the critical importance of adopting sustainable construction practices as a key strategy to combat climate change.

In the second session, Ir. Ts. Dr. Hj Mohd Khairolden Ghani of CREAM presented on the "Green and Sustainability Agenda in Construction." He highlighted the key milestones of Malaysian government initiatives and standards in promoting sustainable construction.

The event provided valuable insights into sustainable construction practices from esteemed speakers and served as a platform for networking and fostering connections among industry professionals.









## The Inaugural Minconsult Maestro Series: Nation and Corporations: Challenging Convention to Deliver ESG Ambition

Date: 22 August 2024

Venue: Minconsult Sdn Bhd Headquarters, Petaling Jaya

On August 22, Ir. Ts. Dr. Hj Mohd Khairolden, Manager of BPIP at CREAM, attended the inaugural Minconsult Maestro Series, presented by Dato' Ir. Dr. Dennis Ganendra, Chief Executive Officer of Minconsult. During the session, Dr. Ganendra emphasized that delivering on ESG (Environmental, Social, and Governance) ambitions requires a multifaceted approach. Nations must create an enabling environment through progressive policies and incentives, while corporations must challenge traditional business norms and integrate ESG into their long-term strategies. Collaboration between governments and corporations is crucial to overcoming barriers to ESG implementation and making meaningful progress toward sustainability goals.

In a world where ESG has become a critical measure of success, Dr. Ganendra urged both the public and private sectors to move beyond mere compliance and fully embrace ESG's potential to create sustainable value for society and the environment. Dr. Ganendra's presentation offered a compelling vision for the future of ESG, highlighting the importance of challenging conventional practices and embracing collaboration to drive sustainability at both the national and corporate levels.

#### Key Takeaways:

- ESG is a business imperative, not just a regulatory requirement.
- Collaborative efforts between nations and corporations are essential to achieving ambitious ESG goals.
- Businesses must move beyond short-term profit models and focus on long-term sustainability.
- Leveraging technology is vital for precise ESG measurement and accountability.
- Governments should provide flexible, supportive regulatory frameworks to encourage corporate innovation.







## Libat Urus Bersama Pengeluar Bagi Pemerakuan Pematuhan Standard (PPS) Bahan Binaan 'Ready Mix Concrete' (RMC) Dan Aluminium

Date: 22 August 2024

Venue: Pan Borneo Hotel Kota Kinabalu, Sabah





CREAM MKRM Sabah is once again invited by CIDB Sabah as one of speaker in their programme titled "Libat Urus Bersama Pengeluar Bagi Pemerakuan Pematuhan Standard (PPS) Bahan Binaan 'Ready Mix Concrete' (RMC) Dan Aluminium". Held on 22nd August 2024 in Pan Borneo Hotel Kota Kinabalu, the event was attended by around 50 stakeholders in the state representing RMC and Aluminium manufacturers and suppliers.

Pn Nor Azila of CREAM MKRM Sabah was one of the speakers in the event. She presented about CREAM role and function especially on Product Certification services which will benefit local industry players. At the same time, she presented the services offered by Makmal Kerja Raya Malaysia Sabah which is now in full operation.

The event was officiated by CIDB Sabah State Director, En. Nazri Zakaria and features speakers from CIDB Kuala Lumpur and local industry representatives.







#### Site Visit for Case Study to IBS Projects in Sibu and Mukah, Sarawak

Date: 27-28 August 2024

Venue : Sibu & Mukah, Sarawak

A delegation from the Construction Industry Development Board (CIDB) and the Construction Research Institute of Malaysia (CREAM) visited several ongoing projects utilizing Industrialized Building System (IBS) components in Sibu and Mukah, Sarawak, on August 27-28, 2024. The delegation was warmly received by representatives from the Public Works Department (JKR) Mukah, who provided insights into the local implementation of IBS in school projects.





Sarawak is actively promoting the use of IBS in construction projects, aligning with the federal government's directive outlined in Pekeliling 1.10, which mandates the use of IBS for government projects valued at more than RM10 million. Although some of the projects visited are valued at less than RM10 million and are therefore not required to use IBS under this mandate, the Sarawak government has taken the initiative to support the use of IBS components, particularly for constructing building walls. This move demonstrates Sarawak's forward-thinking approach to adopting sustainable and efficient construction technologies.

The first site visited was Sekolah Kebangsaan Kg. Senau, which employs Autoclaved Aerated Concrete (AAC) blocks for wall construction. These blocks, sourced from Peninsular Malaysia, face logistical challenges due to long delivery times from the Bintulu port to the project site. The beams and columns, however, are constructed in situ. The use of AAC blocks, while beneficial for their insulating properties, has highlighted the complexities of sourcing materials from outside Sarawak, given the time and costs involved in transportation.









The second case study was Sekolah Kebangsaan Kampung Petanak, and the third site was Sekolah Kebangsaan Dijih, both utilizing United Acotec Concrete (UAC) panels, also sourced from Peninsular Malaysia. Despite the availability of locally manufactured IBS panels in Sarawak, the contractor opted for UAC panels from the Peninsula due to their lower cost. However, this decision came with the drawback of extended delivery times. The contractor noted that these two projects, along with another, employ the same IBS construction method, which helps offset the high initial investment costs associated with IBS technology, such as the RM100,000 pump machine required for the system. By standardizing the method across multiple projects, the contractor can mitigate some of the financial challenges related to IBS implementation.

The final case study visited was Sekolah Kebangsaan Kg. Penasu Daro. This project exceeds the RM10 million threshold, making IBS mandatory. It utilizes precast components, including beams, columns, and hollow core slabs. Despite its location in a rural area, which requires crossing palm oil estates and a river, the transportation of these precast components has not posed significant challenges, as there are access roads. According to the manufacturer, the delivery of IBS components to rural areas is feasible as long as road access is available, showcasing the flexibility of IBS systems even in less accessible regions.

This technical visit underscores Sarawak's ongoing commitment to promoting IBS in construction. The state's support for the system, evident through the adoption of IBS components in smaller-scale projects, highlights a broader vision of enhancing construction efficiency and sustainability.



### Malaysia International Construction and Infrastructure Technology Exhibition, MBAM OneBuild 2024

Date: 28-30 August 2024

Venue: Kuala Lumpur Convention Centre, Kuala Lumpur (KLCC)





The OneBuild 2024 Exhibition, held at the Kuala Lumpur Convention Centre (KLCC) from August 28 to 30, 2024, brought together industry leaders, innovators, and professionals from across Malaysia's construction sector. Organized by the Master Builders Association Malaysia (MBAM), the event provided a comprehensive platform for showcasing the latest construction technologies, materials, and best practices. The exhibition was officially launched by the Minister of Works, Dato' Sri Alexander Nanta Linggi, who graced the event with a keynote address emphasizing the critical role of innovation and sustainability in driving the nation's construction industry forward.

A standout moment during the event was the Minister's visit to the booths of the Construction Industry Development Board (CIDB) and the Construction Research Institute of Malaysia (CREAM). His visit underscored the importance of CIDB and CREAM's contributions to the construction sector. At the booth, CREAM highlighted its latest initiatives aimed at improving industry standards, including training programs, certification systems, and efforts to promote sustainable construction practices.

The OneBuild 2024 Exhibition featured a diverse range of exhibitors, each displaying the future of construction. The CIDB and CREAM booth attracted substantial attention, serving as a hub for discussions on how the latest technologies and research could transform the industry. Visitors to the booth explored solutions ranging from digital tools for construction management to advancements in building materials designed for greater sustainability and resilience.

In conclusion, the OneBuild 2024 Exhibition was a significant event that not only showcased the latest in construction technology and innovation but also reinforced the importance of collaboration between government bodies, industry leaders, and researchers in driving the construction industry forward.



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## Assessing the Impact of Recent Diesel Price Hikes to the Construction Industry: Site Visit to JKR Daerah Gombak project

Date: 29 August 2024

Venue: Gombak, Kuala Lumpur

On August 29, 2024, the Construction Research Institute of Malaysia (CREAM) conducted a site visit to the Jabatan Kerja Raya (JKR) road construction project connecting Kampung Sri Indah A to Jalan Hospital Sungai Buloh (B9) in Daerah Gombak, Selangor. This visit was part of a research grant awarded to CREAM by the Construction Industry Development Board (CIDB) to study the impact of recent diesel price hikes on construction industry stakeholders.

The site visit provided critical insights into the challenges faced by the project team due to increased diesel costs. Discussions with contractors and JKR representatives revealed significant concerns over rising operational expenses, particularly in fuel consumption for machinery and transportation of materials. The team highlighted the strain on project budgets and the potential for delays as a direct consequence of escalating diesel prices.

Stakeholders shared their strategies for mitigating these effects, including efforts to optimize fuel usage. These discussions offered valuable perspectives for understanding the broader implications of diesel price fluctuations on construction projects.

CREAM extends its sincere gratitude to all stakeholders involved in the visit. Their cooperation and insights were instrumental in advancing the research and providing a clearer picture of the industry's current challenges.





# Transforming Construction: CQMS Insights from Seminar Kontraktor Malaysia Madani in Keningau & Kota Kinabalu.

Date: 4 July 2024 & 4 September 2024 Venue: Keningau & Kota Kinabalu, Sabah

In a continued effort to elevate standards and awareness within the construction industry, CIDB Sabah successfully held the Seminar Kontraktor Malaysia Madani in Keningau on July 4, 2024, and in Kota Kinabalu on September 4, 2024. These seminars are part of CIDB Sabah's ongoing initiatives to educate contractors about the essential Contractor Registration Regulations and Procedures, as well as to enhance their understanding of the legal requirements and compliance standards under ACT 520. CREAM MKRM Sabah was invited to participate, with Puan Nor Azila representing the organization and presenting on the Contractor's Quality Management System (CQMS), while briefly explaining the services offered by MKRM Sabah.

As the sole subsidiary of CIDB entrusted with introducing the Contractor Quality Management System (CQMS) to industry players, particularly contractors in Malaysia, CREAM plays a significant role. With this mandate, CREAM is dedicated to raising awareness and understanding of CIS: 29. The CQMS is essential for ensuring high-quality standards in construction projects, helping contractors comply with regulations, manage risks, and maintain detailed records. Furthermore, CQMS promotes continuous training and improvement, leading to better performance and innovation. By following CQMS, contractors can deliver safer, more reliable projects that meet client expectations and enhance their reputation in the industry.

The seminar in Keningau was held at Dewan Salingkawang, Pusat Kraf Tangan Sabah, and was inaugurated by Mr. Junior Fred Vincent, Pemimpin Pembangunan Masyarakat N.40 Bingkor, along with Mr. Nazri Zakaria, Pengarah Negeri CIDB Sabah. CIDB Sabah's effort to explore the hinterland provides a great opportunity for CREAM MKRM Sabah to promote our services among industry players, whether urban or rural, within the Sabah state.







In Kota Kinabalu, the event took place at the Hilton Hotel and was inaugurated by CIDB Board Member Datuk Dr. Rolland Chia Ming Shen. This event also included the Majlis Penyampaian Anugerah Khas Kontraktor 2024 and was attended by 104 participants, including contractors and representatives from government agencies.

The Seminar Kontraktor Malaysia Madani in Keningau and Kota Kinabalu highlighted the transformative potential of the CQMS in the construction industry. These seminars effectively educated contractors and industry players about the numerous benefits of CQMS. The successful engagement and participation at these seminars mark a significant step toward achieving these goals.









#### Sesi Latihan Peningkatan Skor Penilaian QLASSIC dan SHASSIC

Date: 5 September 2024

Venue: The MET Corporate Towers

On September 5th, CIDB Malaysia and the Construction Research Institute of Malaysia (CREAM) successfully organized a training session aimed at enhancing QLASSIC and SHASSIC assessment scores. The event took place at The MET Corporate Towers, bringing together industry professionals eager to improve their construction practices.

The training for **QLASSIC** Assessment Scores featured Ts. David Chung Ung Chen, a CIDB Certified QLASSIC Trainer, and welcomed 15 participants from eight companies, including developers and contractors. The primary objectives of this session were to raise awareness among construction industry practitioners in Malaysia about best practices in construction quality and to assist in improving QLASSIC assessment scores for future projects.

In addition, the training for **SHASSIC Assessment Scores** was led by En. Ridzuan Abd Aziz, a CIDB Certified SHASSIC Trainer. This session also attracted 15 participants, representing ten different companies in the sector. The goals were similar: to enhance awareness regarding best practices in safety and health on construction sites and to support improvements in SHASSIC assessment scores for upcoming projects.

Overall, the training sessions highlighted the commitment of CIDB and CREAM to fostering a culture of quality and safety in the Malaysian construction industry, equipping stakeholders with the knowledge and tools necessary for continuous improvement.









## CEO of CREAM attended the Board of Examiners for Site Safety Supervisor & Lifting Supervisor Program by MBAM

Date: 20 September 2024

Venue: MBAM Office



The meeting convenes to evaluate and approve candidates who participated in the Site Safety Supervisor and Lifting Supervisor training offered by MBAM. During the session, Board of Examiners will review and approve the results of the written and practical assessments performed by candidates. This meeting usually takes place 4 to 5 times in a year.

The Members of the Board of Examiners are:

- 1. Ir. Omar Bin Mat Piah, Former Director of DOSH Malaysia
- 2. Ir M. Ramuseren, CEO of Construction Research Institute of Malaysia (CREAM)
- 3. Mr. Foo Check Lee, Former President of MBAM
- 4. Ir. Zamzurin bin Maarof, Director of DOSH WP Kuala Lumpur and Putrajaya
- 5. Dato' Ir. Jamaludin Non, Treasurer General/Technical Chairman of Persatuan Kontraktor Bumiputera Malaysia (PKBM)
- 6. Dr. Faridah Ismail, Associate Professor (Honorary) of Universiti Teknologi MARA, Shah Alam (UiTM)
- 7. Mdm Loh Mei Long, Executive Director of MBAM

MBAM Secretariat: Ms. Chai Min Fung, MBAM Senior Manager

#### Site Visit for Case Study to IBS Projects in Lawas and Bintulu, Sarawak

Date: 24 - 25 September 2024 Venue: Lawas & Bintulu, Sarawak

As a continuation of the case studies on IBS Projects in Sarawak, a second delegation was assigned to visit two additional projects located in Lawas and Bintulu.

Lawas, a small town in the northeastern part of Sarawak, Malaysia, near the borders of Brunei and Sabah, is relatively isolated. The first project visited was SMK Lawas, overseen by JKR Pasukan Projek Khas II (PPK II), which utilizes both precast components and AAC blocks. Due to the project's remote location, IBS components sourced from Peninsular Malaysia and Kuching, Sarawak, were delivered via sea routes using barges. Although the project is scheduled for completion by March 2025, it is currently behind schedule. The contractor attributed the delay to the late delivery of IBS components. Despite the location challenges, the contractor noted that the use of IBS requires fewer workers, helping to alleviate labor shortages. They also acknowledged that the installation process for IBS components is faster than conventional methods.





The second project, SK Ulu Kakus, under the supervision of JKR Sarawak Bintulu, is located in the rural area of Nanga Merit, Sarawak. This project features a hybrid construction method that combines conventional techniques with IBS, including in-situ columns and beams, along with IBS permanent formwork for the walls. However, the project faced significant delays due to issues with the delivery of construction materials and components, leading to two extensions of time (EOT), each lasting six months. The access roads to the site include poorly maintained estate and private roads, which are prone to landslides and require frequent bridge repairs, further contributing to the delays. To address these challenges, the contractors spent four months improving road access to the site. Another complication arose from the use of IBS permanent formwork, which requires a pump for installation. The contractor noted that productivity could have been improved if they had access to more than one pump and had utilized AAC blocks instead. This is because the permanent formwork system requires the delivery of a larger volume of materials, including infill materials, whereas AAC blocks require only blocks and mortar.

#### Site Visit for Case Study to IBS Projects in Lawas and Bintulu, Sarawak

Date : 24 - 25 September 2024 Venue : Lawas & Bintulu, Sarawak

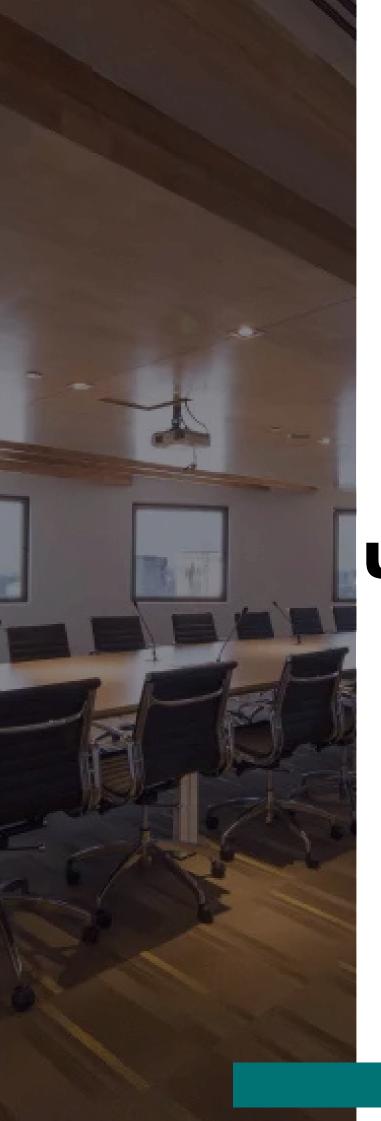
Overall, these case studies highlight the critical importance of effective planning, logistical support, and resource management in successfully executing IBS projects in isolated regions. They also emphasize the need for continuous evaluation and adaptation to improve productivity and adhere to project timelines.











# upcoming events

# SEMINAR **AWARENESS CONTRACTOR'S QUALITY MANAGEMENT SYSTEM**

Anjuran Bersama: CIDB (ZZ





Alternatif kepada

ISO 9001

Contractor's Quality Management System (CQMS), adalah satu sistem yang direka untuk menilai pelaksanaan sistem pengurusan kualiti kontraktor berdasarkan piawaian tertentu. CQMS menggariskan keperluan kualiti berstruktur untuk kontraktor merentasi pelbagai peringkat pembinaan, termasuk tender, perancangan, perolehan, pembinaan dan pasca pembinaan.

CQMS telah diiktirafkan oleh CIDB Malaysia untuk dan memegang status yang setara dengan ISO 9001 bagi CIDB MCORE & SCORE.

#### Intipati Seminar:

- Pengenalan kepada CQMS
  Skop utama CQMS
  SOP dan proses pensijilan

- Proses pentauliahan dan syaratsyarat menjadi auditor

**TARIKH** : 14 NOVEMBER 2024 (KHAMIS)

MASA : 8AM - 5PM

TEMPAT: BILIK SEMINAR TINGKAT 6,

CIDB NEGERI SELANGOR,

WISMA PKPS, PERSIARAN PERBANDARAN, SEKSYEN 14, 40575 SHAH ALAM, SELANGOR

Yuran: RM150/pax

# sekarana

\*Terhad kepada 50 pax sahaja! \*Pra Syarat Pendaftaran - Tiada ISO 9001

#### Siapa Perlu Hadir:

- Pengurus Kualiti
  Pengurus Projek
  Perunding, dan sesiapa sahaja yang terlibat dalam perancangan, pelaksanaan, penyelenggaraan atau penambahbaikan QMS.



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