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CREAM
CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA

CREAM

e-magazine

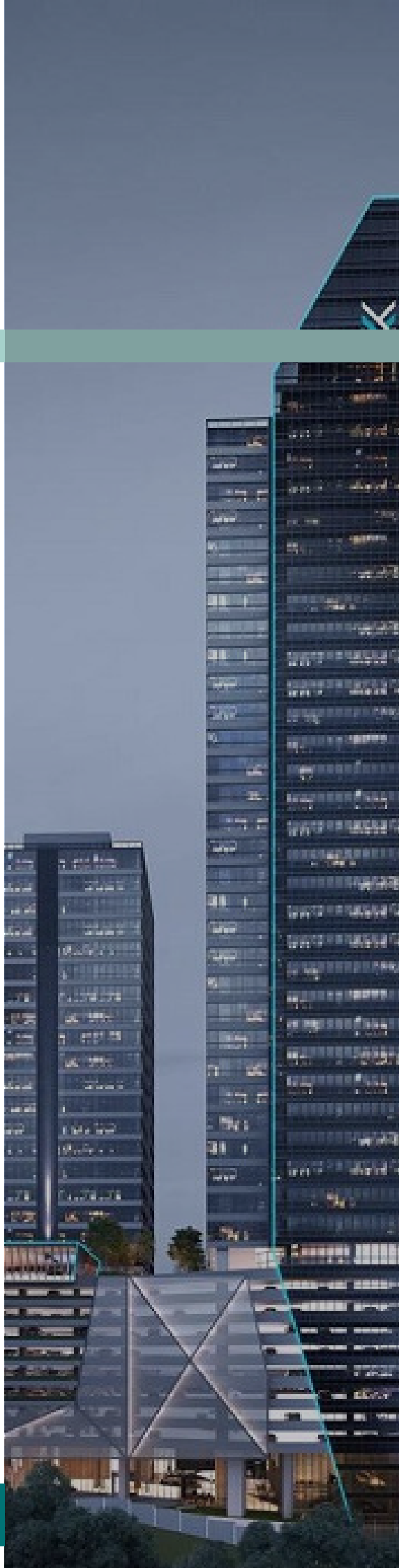
COVERAGE

STANDARD INDUSTRI PEMBINAAN

(CONSTRUCTION INDUSTRY STANDARD)

CIS 29:2021

editorial team



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.

mission

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

contents

Construction Research Institute of Malaysia Moves to CIDB 520, The Met Corporate Towers

Source: Cheksern Young

The Construction Research Institute of Malaysia (CREAM) has embarked on an exciting journey with its recent relocation to Level 14, CIDB 520, The Met Corporate Towers, marking a significant milestone in the Institute's evolution. Formerly situated at Level 29, Sunway Putra Tower, this strategic move, which commenced operations on February 2nd, 2024, promises enhanced collaboration and efficiency for CREAM.

The decision to relocate to CIDB 520 was driven by a desire to foster closer ties with CREAM's parent company, CIDB Malaysia. By sharing the same roof, CREAM aims to streamline operations, facilitate seamless communication, and promote efficient teamwork. This proximity not only strengthens the relationship between CREAM and CIDB Malaysia but also lays the foundation for synergistic efforts in advancing the construction industry.

Operating within the same premises as CIDB Malaysia offers myriad benefits for CREAM. The close proximity enables easier access to resources, expertise, and knowledge sharing opportunities. Collaboration between the two entities is poised to flourish, leading to innovative solutions, impactful research outcomes, and ultimately, positive contributions to Malaysia's construction sector.

Moreover, the relocation to CIDB 520, The Met Corporate Towers, signifies CREAM's commitment to staying at the forefront of industry trends and best practices. The modern amenities and cutting-edge infrastructure of the new workplace provide an inspiring environment for CREAM's team members to thrive and excel in their endeavors.

As CREAM settles into its new home, the Institute remains dedicated to its mission of advancing research and development in the construction domain. By leveraging the synergies of co-location with CIDB Malaysia, CREAM is poised to embark on ambitious projects, undertake pioneering studies, and address the evolving needs of the industry with agility and innovation.

In conclusion, the relocation of CREAM to CIDB 520, The Met Corporate Towers, symbolizes a new chapter in the Institute's journey. With a renewed focus on collaboration, efficiency, and innovation, CREAM is well-positioned to make significant contributions to the advancement of Malaysia's construction sector, driving sustainable growth and development for years to come.


CIDB
MALAYSIA


LIVING HALL
KITCHEN
MASTER ROOM
ROOM
FRAGILE


LIVING HALL
KITCHEN
MASTER ROOM
ROOM
FRAGILE


LORI SEWA / MY MOVERS
017-202 1661
HOUSE & OFFICE MOVERS

Celebrating Excellence: CREAM-MKRM Borneo is now an Accredited Laboratory (SAMM) - MS ISO/IEC 17025

by Ahmad Hazim Abdul Rahim, Rohani Mokhtar, ChM. Siti Aishah Ishak, Nor Azila Maulihasan, Masturina Bohi, and Hassanain Hafiz Mohd Asnan

In a testament to our unwavering commitment to quality and precision, we are thrilled to announce that CREAM-MKRM Sabah and Sarawak have been awarded accreditation under MS ISO/IEC 17025:2017 on November 15, 2023. This significant achievement highlights our dedication to maintaining the highest standards of testing services.

MS ISO/IEC 17025:2017 is an internationally recognized standard that specifies the general requirements for the competence of testing and calibration laboratories, adopted from the ISO/IEC Standard. Compliance with this standard demonstrates that a laboratory operates competently and generates technically valid results. Achieving accreditation under MS ISO/IEC 17025:2017 signifies our laboratory's ability to consistently produce accurate and reliable data, ensuring the trust and confidence of our clients and stakeholders.

The primary aim following the establishment of MKRM branches in Sabah and Sarawak is to achieve recognition as Conformity Assessment Bodies (CABs), commonly referred to as accredited laboratories. This accreditation will elevate the standards of performance in the construction sector, particularly within the domestic markets of Sabah and Sarawak, and subsequently approved by regulatory bodies such as the Construction Industry Development Board Malaysia (CIDB), and other local authorities.

Obtaining accreditation under MS ISO/IEC 17025:2017 is a rigorous process that involves thorough evaluation of a laboratory's quality management system, technical competence, and ability to produce precise and accurate test results. MKRM Sarawak and MKRM Sabah underwent an on-site audit for the Extension of Branch (EOB) under MS ISO/IEC 17025:2017 on September 11-12, 2023, and October 11-12, 2023, respectively. This process included approved signatories interview sessions to assess their competence. To ensure the successful achievement of accreditation, MKRM systematically plans and coordinates activities within the designated timeframe for the accreditation application process. Personnel at MKRM Sabah and Sarawak undergo ongoing Staff Competency Evaluations (SCE) to qualify them as approved signatories and competent individuals. Additionally, MKRM Sarawak organized an Interlaboratory Comparison Program, which involved participation from MKRM Sabah and three other accredited laboratories, yielding satisfactory results. Our team has worked diligently to meet and exceed the stringent requirements set forth by the standard, undergoing comprehensive assessments and audits to demonstrate our proficiency in various testing activities.

Accreditation under MS ISO/IEC 17025:2017 brings numerous benefits to our laboratory and our clients. It enhances the credibility and reliability of our testing services, instilling confidence in the accuracy and validity of our results. By adhering to internationally recognized best practices, we ensure consistency, traceability, and comparability of our data, facilitating acceptance of our reports in domestic and international markets. Additionally, accreditation fosters continual improvement within our laboratory, driving us to constantly enhance our processes and procedures to deliver exceptional service and exceed customer expectations.

In the future, CREAM-MKRM Borneo aims to expand its scope to include testing services for iron and steel products. Additionally, it will actively engage with local government and industry stakeholders to enhance its presence within the state. CREAM-MKRM Borneo is committed to reaching out to industry players by offering a comprehensive range of services. Currently, the testing services provided by MKRM Sarawak and MKRM Sabah are focused on three main products: concrete (both hardened and ready-mixed), cement, and aggregates, with a specific emphasis on tensile and corrosion tests for iron and steel. Over time, the testing capabilities will be extended to cover additional aspects of iron and steel testing, followed by Industrialized Building System (IBS) testing by the end of 2025.

At CREAM-MKRM Borneo, our pursuit of excellence is ingrained in everything we do. Achieving accreditation under MS ISO/IEC 17025:2017 is a testament to our unwavering commitment to quality, precision, and customer satisfaction. We are immensely proud of this accomplishment, which underscores our dedication to upholding the highest standards of professionalism and integrity in the field of testing and calibration.

The attainment of MS ISO/IEC 17025:2017 accreditation is a significant milestone for CREAM-MKRM Borneo, affirming our position as a trusted provider of testing services. We remain steadfast in our commitment to excellence, continually striving to uphold the highest standards of quality, accuracy, and reliability in all aspects of our operations. As we celebrate this achievement, we extend our sincere gratitude to our clients, partners, and team members whose unwavering support and dedication have made this success possible. We look forward to continuing to serve you with excellence and distinction in the years to come.

For additional information, kindly get in touch with our team:

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Hassannain Hafiz: hassanain@cream.my

MKRM Sarawak representatives
Siti Aishah: aishah@cream.com
Masturina: masturina@cream.my

Concrete Sleepers Testing at CREAM-MKRM

by Ts. Yuzairy Rozaidi Rohaizan, Mohd Azizi Arshad, Ramlee Mohamad Kafli & Muhammad Zulharith Zulkefli

What are concrete sleepers?

Concrete sleepers have been utilized in Malaysia since the early 1980s as a response to the scarcity of timber and as a more sustainable alternative. With the advancement of prestressed concrete technology and the availability of raw materials, local operators and suppliers have continued to adopt the use of concrete sleepers to this day.

Sleepers, integral components of railway infrastructure, are laid transversely to the rail track and supported and secured by rail fasteners. Their primary function is to transfer loads from the rails to the ballast and sub-grade below. Alongside concrete sleepers, other materials used include timber, composite materials, cast iron, and steel, with sleepers being designed in various shapes and sizes to suit different applications.

Application

Figure 1 illustrates MKRM's dynamic testing frame equipped with 300kN actuators. Before a newly produced batch of concrete sleepers is laid and used on the track, standardized laboratory tests are conducted to assess its suitability and quality. These tests include basic material tests such as fine and coarse aggregate tests, cement quality tests, prestressing tendons relaxation tests, and concrete compressive strength tests. Furthermore, the finished product (concrete sleepers) must undergo static load and dynamic load tests, simulating the passing rolling stock during the concrete sleeper's service life to ensure its safety and reliability.

Figure 1: Concrete Sleeper Test Set Up

At Makmal Kerja Raya Malaysia (MKRM), we are equipped with two units of 300 kN dynamic actuators and a dynamic test frame capable of conducting both static and dynamic test requirements, as depicted in Figure 1. The standard practice in the Malaysian rail industry is to conduct concrete sleeper tests as requested by the respective rail operators or project owners, primarily using Australian Standard or British Standard (AS 1085 or BS EN 13230).

Static load tests on prestressed concrete sleepers are performed on the top and bottom parts of the rail seat and at the mid-span of the sleepers respectively. The top part of the rail seat is then subjected to dynamic loads ranging from 2 to 3 million cycles (depending on the standard practice) at a rate of 4 to 10 Hz. The bonding between the prestressed tendons and concrete of the sleepers is also examined. Lastly, the ultimate load test is carried out until failure of the rail seat. The test requirements aim to ensure that there are no cracks at the rail seat and mid-span of the concrete sleeper sample, as shown in Figure 3.

Below are the test services for the rail industry that is offered by MKRM:

- Bending moment test on sleepers (Negative/Positive)
- Bending moment test on rail seat (Negative/Positive)
- Dynamic load test on rail seat
- Ultimate load test on rail seat
- Development length (Bond Strength) test
- Tensile Mechanical Properties of Rail Track
- Chemical composition test
- Hardness Test

For more details about our testing services, kindly email your queries to mkrm@cream.my

Figure 2: Competent technician ensuring the center positioning of the loading sequence.

Figure 3: Competent technician examines the concrete sleeper sample for cracks during the test.

Readiness of Malaysia in Implementing IoT Technologies for Smart City Industry

by Ahmad Shahir Mohamad

In recent years, there have been heated debates on the quality of life experienced by people, particularly in Malaysia, where the population has surged to over 33 million as of 2023 from 24.74 million in 2003. This growth has intensified concerns about addressing urban challenges such as traffic congestions, rising crime rates, and pollution. According to Mckensey Research, the implementation of smart cities can enhance quality-of-life indicators by 10 to 30 percent, with ASEAN megacities already showcasing excellence in awareness and modern technology usage. Reflecting on this, Internet of Things (IoT) technologies have emerged as pivotal in integrating key components for setting up smart cities, particularly in Malaysia where urban needs are increasingly demanding. The implementation of smart cities aids in improving the transportation sector, digital equity, and infrastructure, while enhancing public utilities through data analytics and smart sensor technology.

Nonetheless, despite the promising functionality and advantages of smart cities in transforming life and services in urban areas, significant barriers hinder the progress of implementing IoT technologies.

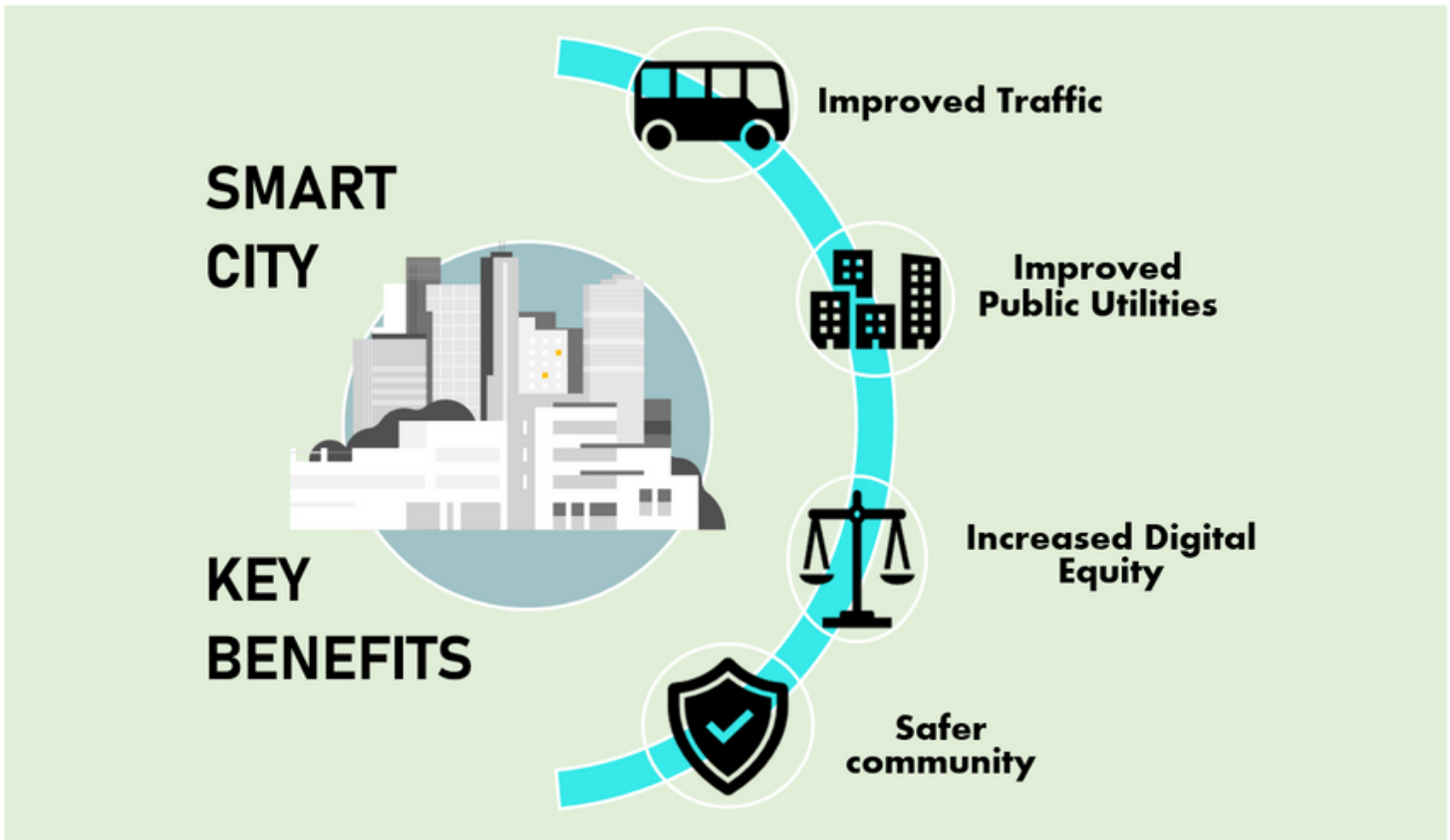


Figure A: Key Benefits of Smart City

INTRODUCTION

The concept of IoT has gained widespread implementation globally. Among ASEAN countries, Singapore embarked on its journey in 2013, focusing on wireless technology, smart products, and becoming a smart nation. According to the Malaysian National IoT Strategic Roadmap, IoT opportunities are vast, with the Gross National Income (GNI) expected to increase from RM9.5 billion in 2020 to RM42.5 billion by 2025. This growth is attributed to high mobile penetration, a large number of internet users, and strong social media presence among the country's population. Despite this encouraging trend and robust starting point to facilitate IoT in the domestic market, several challenges need addressing to fully leverage the potential of IoT in smart city connectivity.

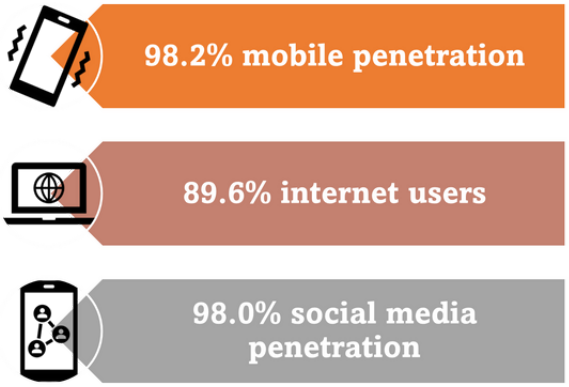


Figure B: Readiness of IoT Technologies in Malaysia

CURRENT APPLICATION OF IOT TECHNOLOGIES IN DEVELOPING SMART CITY IN MALAYSIA

Smart Agriculture

Data collected by IoT sensors monitor weather conditions, soil quality, and crop growth progress. This data aids in tracking machinery, staff, and equipment productivity. The Ministry of Agriculture and Food Industry (MAFI) spearheads this initiative, enabling better planning for food production and modernizing the agro-food industry using IoT and automated technology-driven concepts.

Smart Grid

Tenaga Nasional Berhad (TNB) initiatives in producing smart grids incorporate automated monitoring and control, data analytics, and distributed energy resources. Two-way communications between utilities and consumers have been instrumental in reducing carbon footprint, as well as optimizing power generation, distribution, and consumption costs.

Smart Parking System

IoT sensors and cameras embedded in parking spots detect vacancies, notifying users via smart parking apps through cloud systems. This reduces parking time, minimizes pollution, and provides real-time parking analytics for the city.

KEY CHALLENGES IN IMPLEMENTING IOT IN MALAYSIA SMART CITY INDUSTRY

Data Integration

Efficient operation of the smart city industry requires intelligent handling of numerous datasets. Integrating databases, including Geographic Information Systems (GIS), infrastructure, utilities data, and IoT sensors, into third-party applications presents challenges in ensuring user-friendly data interpretation, precise decision-making, and seamless crossovers.

Institutional Barriers

Government plays a pivotal role in disseminating infrastructure and public utilities data crucial for smart city development. Improved communication, clarity, and transparency among different government departments are necessary to overcome institutional barriers and ensure data security.

Security Issues

Cybersecurity threats, including denial of service attacks and bot invasions, pose significant risks to IoT deployments. Despite growing concerns about preventing cyberattacks in Malaysia, user awareness remains low, highlighting the urgent need for robust security measures.

Interrelation between Scalability of Infrastructure and Big Data Management

The massive volume of data generated by IoT technologies requires scalable infrastructure and efficient big data management solutions. While big data offers real-time processing alternatives, integrating diverse data formats into existing infrastructure poses scalability challenges.

CONCLUSION

IoT applications are gaining traction in Malaysia's digital transformation journey, particularly in developing smart cities. Despite the country's readiness for IoT technology, challenges such as data integration, institutional barriers, security issues, and scalability remain significant hurdles. Stakeholders must acknowledge and address these challenges to support the development of smart city components and contribute to building a better nation.

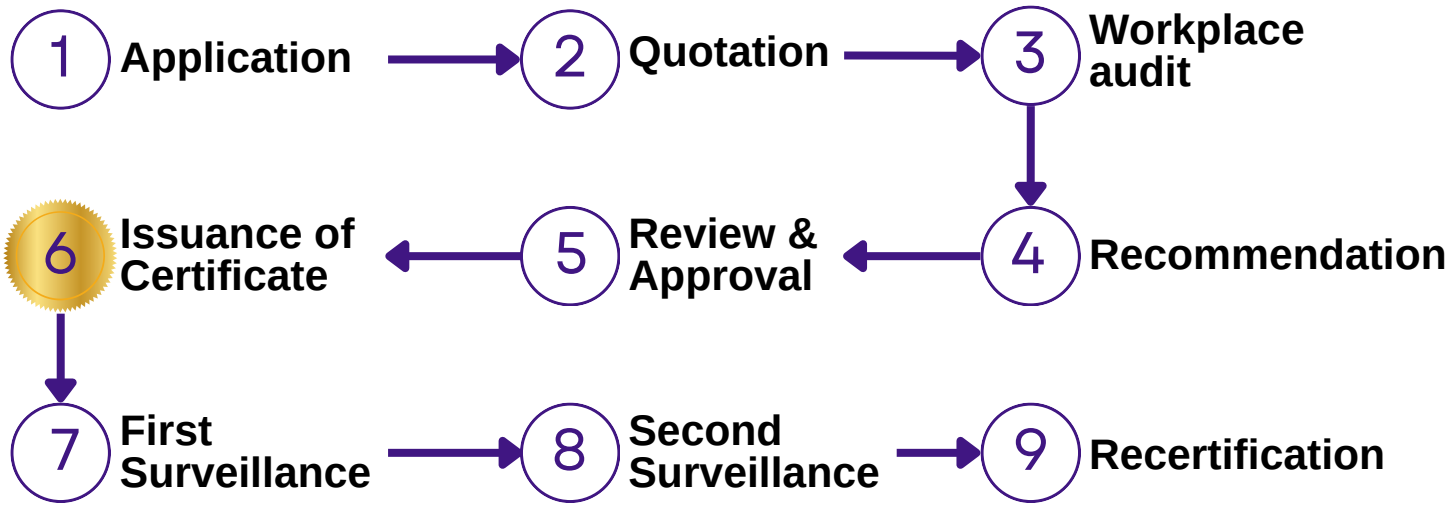
Contractor's Quality Management System (CQMS)

Contractor's Quality Management System (CQMS) CIS 29:2021 is an independent system that evaluates a contractor's quality management implementation based on the Construction Industry Standard (CIS 29). Serving as an affordable alternative to ISO 9001, CQMS is ideal for budget-conscious contractors who prioritize the quality of their work. By choosing CQMS, contractors can maintain quality control, meet client standards, and gain additional benefits for PPK registration in Malaysia. Implementing CQMS also earns contractor's extra points in MCORE/SCORE CIDB assessments for PPK registration.

CIDB MALAYSIA Construction Industry Development Board Malaysia
LEMBAGA PEMBANGUNAN INDUSTRI PEMBINAAN MALAYSIA
Ibu Pejabat CIDB,
Tingkat 10, Menara Dato' Onn, Pusat Dagangan Dunia
No 45, Jalan Tun Ismail, 50480 Kuala Lumpur, Malaysia
Tel:603-40477000 Faks:603-40477020
https://www.cidb.gov.my

With a certification fee of RM4000, CQMS covers one-day training, documentation for the quality manual, third-party audit, and certification to CIS 29:2021. The audit process is streamlined, taking only one day, and the certification remains valid for three years. Furthermore, CQMS carries equivalent weightage to ISO 9001 for CIDB SCORE/MCORE, making it an attractive and cost-effective choice for contractors in Malaysia, specially designed for their needs.

CQMS Process



Validation

Contractor's Quality Management System (CQMS) is applicable for all G1 - G7 contractors and CQMS Certification is given a validity term of three (3) years from the date of issuance. They can be reviewed as and when necessary subject to the CQMS Assessment Programme.

Benefits of CQMS

- Specialized Evaluation: Tailored assessments based on CIS 29
- Cost-effective: an affordable alternative for contractors, only RM4000, with high-quality standards
- Enhanced Reputation: Maintains rigorous quality control, enhancing credibility
- Smooth PPK Registration: Streamlines registration process for Malaysian contractors
- Extra Points in Assessments: Earns additional points in MCORE/SCORE CIDB assessments
- Streamlined Audit Process: One-day audit minimizes disruptions and saves time
- Long-Term Certification: Valid for three years, ensuring continuous credibility
- Equivalent Recognition: Carries same weightage as ISO 9001 for CIDB SCORE/MCORE
- Free one seat (1) for monthly CREAM Webinar Series: 10 CCD Points per webinar will be given to an attendee (approx. 240 CCD Points per year)
- A rebate of RM200 for SHASSIC assessments on up to 5 projects in 2024

For more details, please kindly email to
***Ts. Syed Hazni Abd Gani** at syed@cream.my*

Testing Facilities Available at CREAM -MKRM

We offer over 10 years of experience, providing a broad range of services to clients around the globe.

Our global network of laboratories and testing facilities, staffed by knowledgeable, experienced and competent personnel, help you to reduce risks, shorten time to market and demonstrate the quality and safety of materials, components, or products.

Full scale structure component test is our main forte. We can test actual size structure components such as beam, wall, slab, piles, segmental box girder, scaffolding, railway component, etc. We also offer testing services for wide range of construction material for your product quality determination, regulatory requirement, or any other compliance purposes.

CREAM-MKRM and its branches are accredited to MS ISO/IEC 17025 by Standards Malaysia, thus ensuring the high standard and quality of the report produced.

Some of our facilities are:

1. Reaction floor (15m x 26m)
2. Reaction wall (6m x 6m)
3. Universal testing machine 100 kN- 2000 kN
4. 200 kN-300 kN dynamic testing machne 100 kN- 2000 kN
5. 300 kN dynamic actuator
6. 500 kN - 2000 kN static actuator
7. 500 kN resonance testing machine
8. Hardness tester
9. Spectrometer
10. 3D bar measurement

Scope and Testing Services

include but not limited to

IRON & STEEL

Typical Product : Rebar, Plate, Mesh, Wire, Rod, Tube, Strand, Hook, Anchor, Lifting Clutch etc.

- Dimension
- Mass
- Tensile
- Yield
- Fatigue
- Chemical Element Analysis (XRF, Spectrometer, ONH Analyzer)
- Coating thickness (Magnetic & Gravimetric method)
- Coating mass
- Surface coating
- Shear weld
- Flattening
- Surface geometry (Microscope & 3D high speed camera scan
- Pull out force
- Bend/Rebend
- Elogation
- Relaxation
- Hardness (Brinell, Rockwell & Vickers)
- Rebar bond test
- Mechanical splice test
- Weathering
- Corrosion
- Sample cutting

SCAFFOLDING & FALSEWORK

Typical Product : A-Frame, Modular, Tubular, Vertical & Horizontal Frame, Standard, Ledger, Transom, Cross Brace, U-Head & Jack Base, Sleeve, Coupler, Pin, Steel Prop, Platform, Clamp & Hook, Catwalk, Toe board, Guardrail, Stairway etc

- Dimension
- Mass
- Tensile
- Fatigue
- Chemical Element Analysis (XRF, Spectrometer, ONH Analyzer)
- Coating thickness (Magnetic & Gravimetric method)
- Coating mass
- Surface coating
- Bending /Flexural
- Shear
- Proof load
- Cross cut test
- Corrosion
- Weathering
- Deflection
- Surface geometry (Microscope & 3D high speed camera scan
- Load test on U-Head/Jack base
- Side protection test
- Bending test on platform
- Dynamic test on staircase
- Drop test
- Global test on shoring system
- Full scale test in scaffold, falsework & shoring system
- 1x3, 3x3, high tower, low tower
- Test on sleeve & coupler
- Straightness
- Load test on prop
- Pin test on prop
- Unintentional disengagement on prop Cross brace pi

CONCRETE

Typical Product : Ready Mixed Concrete (RMC), Fresh Concrete, Concrete Coring, Mortar, Aggregates, Cement, Bricks, Blocks

- Sample Preparation
- Dimension & Mass
- Compression test (Cube, Cylinder, Core)
- Flexural Test
- Density
- Water absorption
- Specific Gravity
- NDT Test on Concrete
- Slump test
- Cement chemical properties (XRF)
- Sieve analysis
- Compacting factor
- Cube test with RFID technology
- Concrete coring
- Tensile splitting
- Immersion

NON-DESTRUCTIVE TEST (NDT)

Typical Product : Concrete, Iron & Steel , Cement

- Rebound / Schmidt Hammer
- Ground Penetrating Radar (up to 6 m)
- Ultrasonic Pulse Echo Wireless Imaging System
- Eddy Current Instrument
- Digital Ultra Sonic Flaw Detector
- Handheld XRF
- Digital Microscope
- 3D Bar Scanner for Surface Geometry

FULL SCALE STRUCTURAL TEST

Typical Product : Industrialized Building System (IBS) Component, Precast Concrete, Steel Frame, Timber Frame, Formwork, Blockworks, Innovative Product, Wall Panel, Beam, Slab, Hollow Core Slab, Staircase, Precast Piles, Pipes, Culvert, Non Load Bearing Wall, Bridges, Pier, Segmental Box Girder etc.

- Static load test (Vertical, Horizontal)
- Flexural & Bending test
- Compression test
- Load Combination (Vertical + Horizontal)
- Dynamic Load Test
- Dimension
- Proof Load Test
- Design Conformity Test
- Strength & robustness test of Wall Panel
- Customized structure test

RAILWAY INFRASTRUCTURE

Typical Product : Precast Concrete Railway Sleepers, Composite Sleepers, Bearers, Rail Track

- Bending moment test on sleepers (Negative / Positive)
- Bending moment test on rail seat (Negative / Positive)
- Dynamic load test on rail seat
- Fatigue test on rail seat
- Insert Pull out test
- Bend test on rail track
- Chemical composition test
- Hardness Test
- Dynamic/Fatigue test

MKRM SABAH & MKRM SARAWAK

Typical Product : Concrete, Cement, Aggregate & Iron & Steel

CONCRETE

- Compression
- Flexural
- Water depth of penetration
- Slump
- Density
- Dimension
- Air content
- Degree of Compatibility
- Water absorption

CEMENT

- Compression on mortar
- Soundness
- Setting time
- Fineness (Blaine method)

AGGREGATE

- Particle size distribution
- Impact value
- Crushing value
- Flakiness index
- Elongation

IRON & STEEL

- Tensile
- Yield strength
- Elongation
- Dimension

Get our complete list of testing facilities

CREAM would like to congratulate the following project team for their best QLASSIC and SHASSIC achievements. Congratulations!

Project Name: SkyAwani V Residence @ Sentul

Developer:

SkyWorld Development Bhd

Contractor:

Goodwood Builders Sdn Bhd

Architect:

Archimatrix Sdn Bhd

Civil & Structural Engineer:

Asia Pacific Engineering Consortium Sdn Bhd

M&E Engineer:

Duriane Professionals Sdn Bhd

QLASSIC Score:

84%

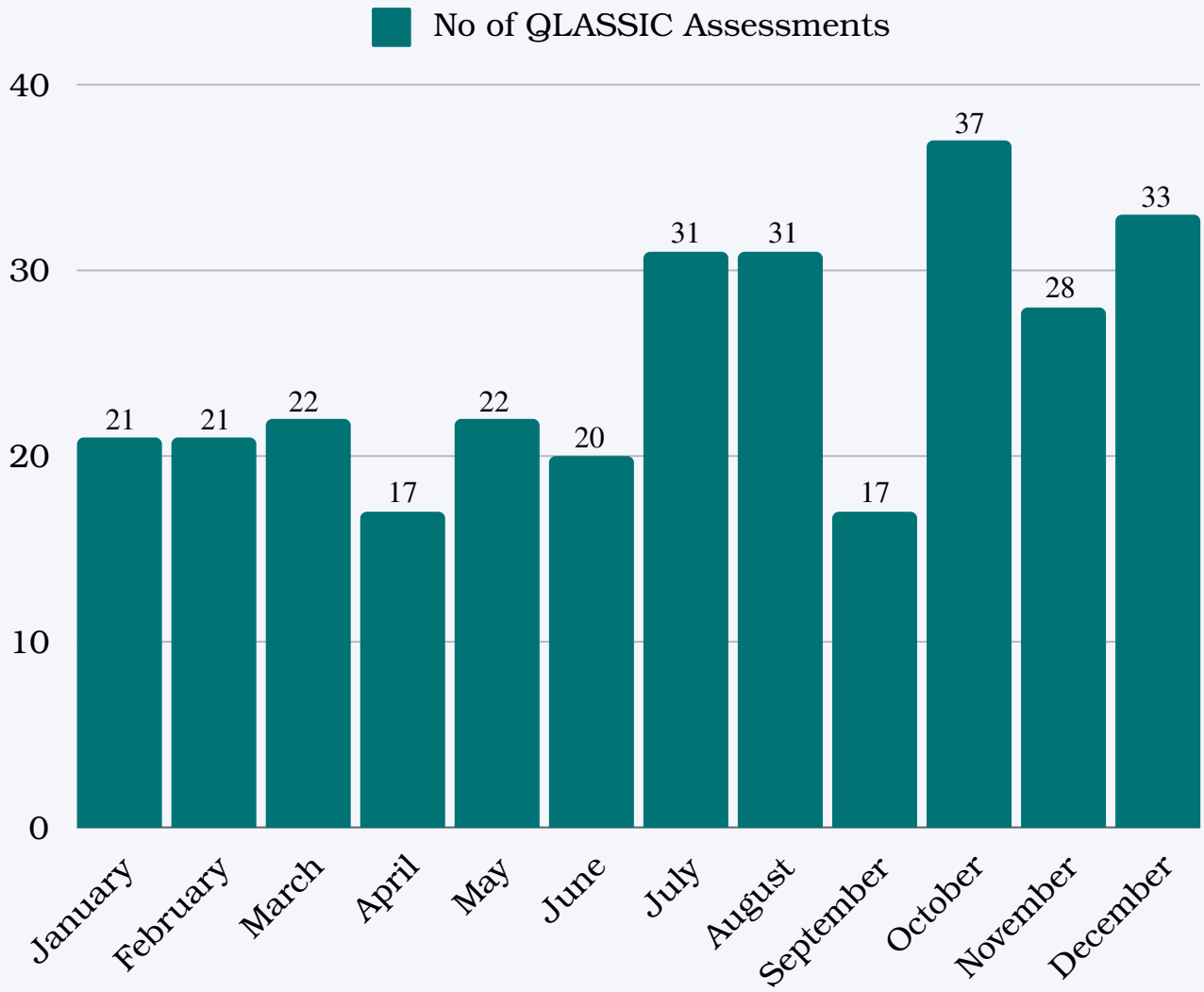
SHASSIC Score:

★★★★★

More info on QLASSIC:

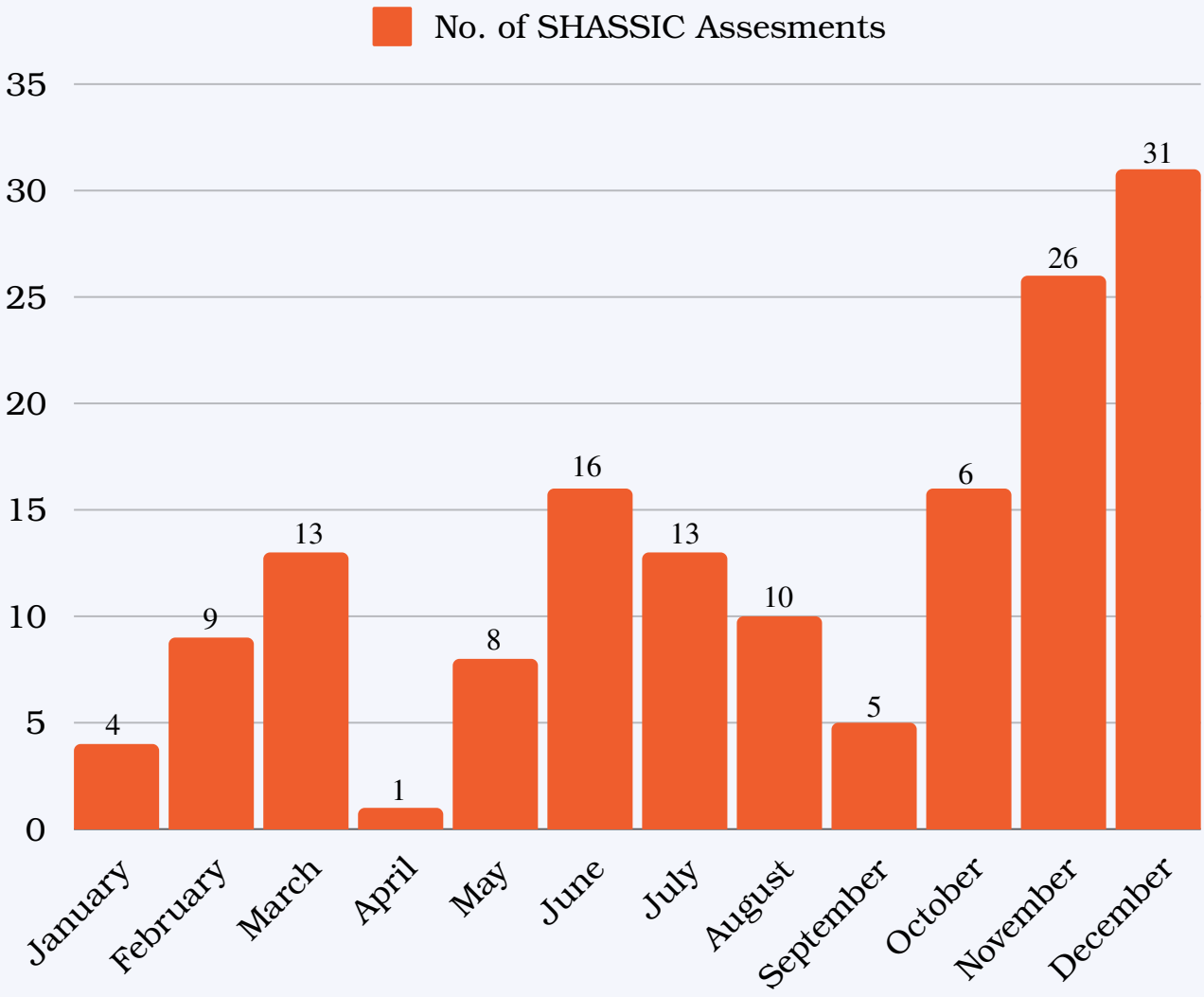
More info on SHASSIC:

QLASSIC
Quality Assessment System in Construction



More info on SHASSIC:

SHASSIC
Safety and Health Assessment System in Construction



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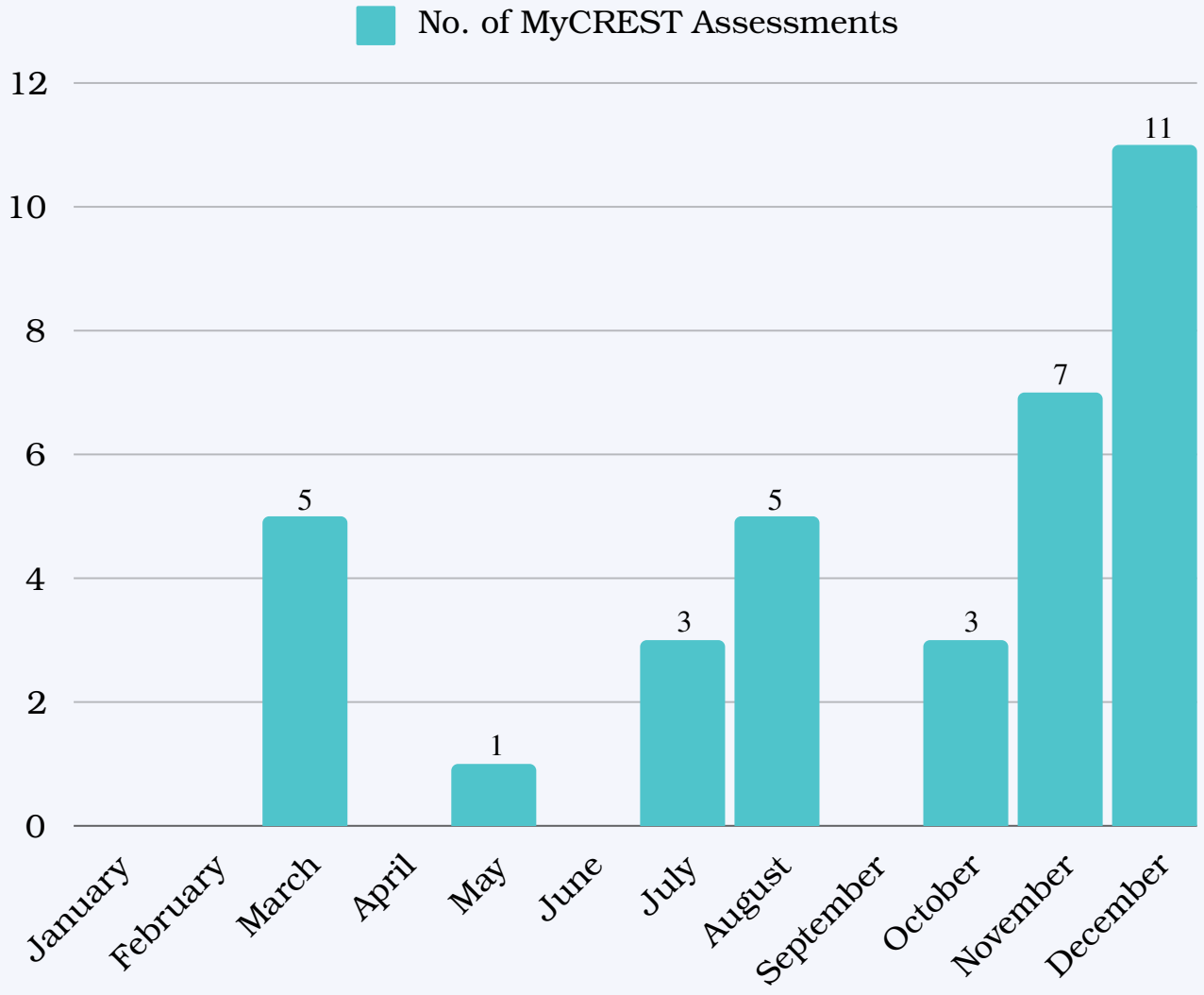
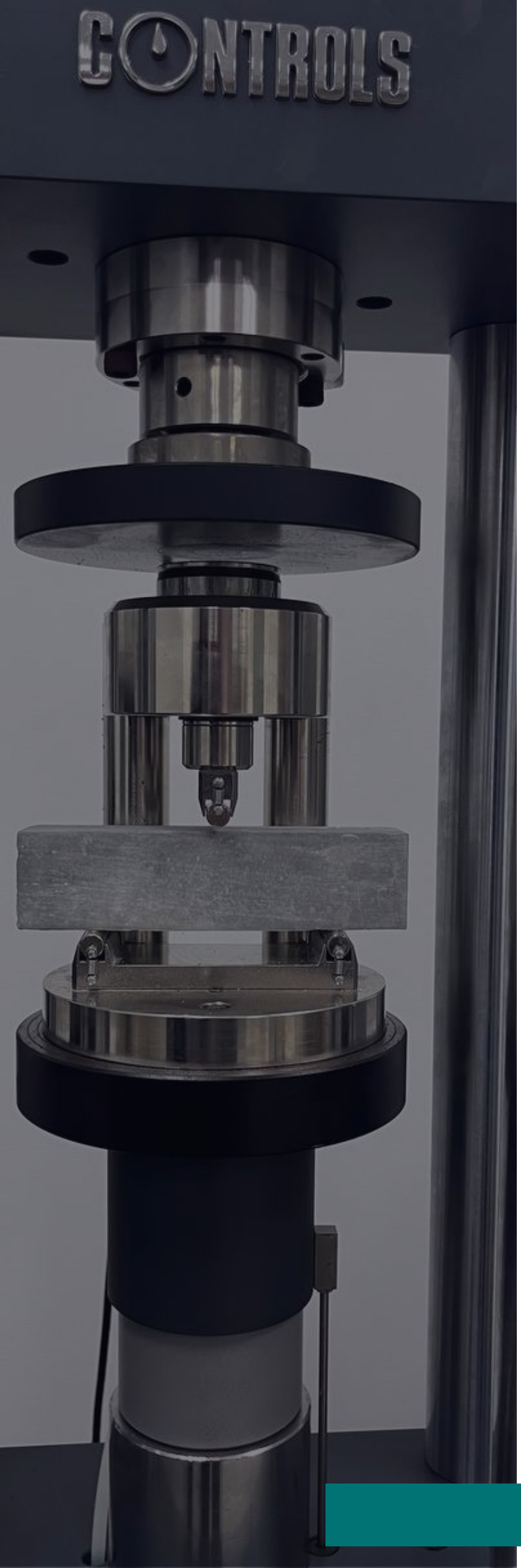


More info on MyCREST:



Activities Highlights

Verification Workshop, C4.0: A Guide for Digital Transformation in the Construction Industry

Date : 23 & 24 January 2024

Venue : Cyberview Resort and Spa, Cyberjaya

In the ever-changing landscape of the construction industry, digitalization stands out as a transformative force, promising heightened efficiency, sustainability, and collaboration. Recognizing the pivotal role of digital technologies, the Construction Industry Development Board (CIDB) has joined forces with the Construction Research Institute of Malaysia (CREAM) to develop a guideline titled 'C4.0: A Guide for Digital Transformation in the Construction Industry'. Recently, a workshop convened to allow representatives of industry players to scrutinize the contents of the guideline, ensuring seamless alignment with industry standards and best practices.

The workshop served as a convergence point for a diverse array of stakeholders, including government representatives, architects, engineers, contractors, and technology experts. Key representatives from CIDBIBS, ACEM, IJM IBS, FAVORIOT, KLCC Projects, PKBM, MTIB, RISM, MRT Corporation, MAFM, PROLINTAS, UTM, MBAM, MBOT, and IEM participated in the event. Delving into various aspects, the focus was on 12 emerging technologies: Building Information Modelling (BIM), Internet of Things (IoT), Cloud and Real-time collaboration, Big Data Analytics, Artificial Intelligence (AI), Blockchain, Augmented Reality (AR), and Virtual Reality (VR), Prefabrication and modular construction, Photogrammetry and 3D scanning, 3D printing and additive manufacturing, Advanced building material, and Autonomous construction.

Through breakout sessions and group discussions, participants meticulously analyzed each section, identifying areas for enhancement and offering constructive feedback. The workshop served as a platform for robust dialogue and collaborative engagement among stakeholders. Questions were posed, insights were shared, and concerns were addressed within an atmosphere of mutual respect and cooperation.

As the workshop drew to a close, it became evident that this collaborative effort marked a significant milestone in the journey toward digital transformation in the construction industry. The feedback received from participants will serve as a guiding force for refining the guideline, ensuring its relevance and efficacy in driving digital adoption across construction projects.

Looking ahead, sustained collaboration and communication among all stakeholders will be paramount. By embracing digitalization wholeheartedly and working hand in hand, the construction industry is poised to unlock new possibilities and redefine the built environment for generations to come.

Visit to IJM IBS Sdn. Bhd.
Date : 31 January 2024
Venue : IJM IBS Sdn. Bhd. Bestari Jaya, Rawang, Selangor.

CREAM, in collaboration with TNB Research and TNB Grid Development, seized an opportunity to visit one of the leading precast manufacturing facilities, IJM IBS Sdn. Bhd. This factory excursion provided invaluable insights into the production process and capabilities of prefabricated concrete components. It afforded us the chance to witness firsthand the automated production methods employed in the creation of these components.

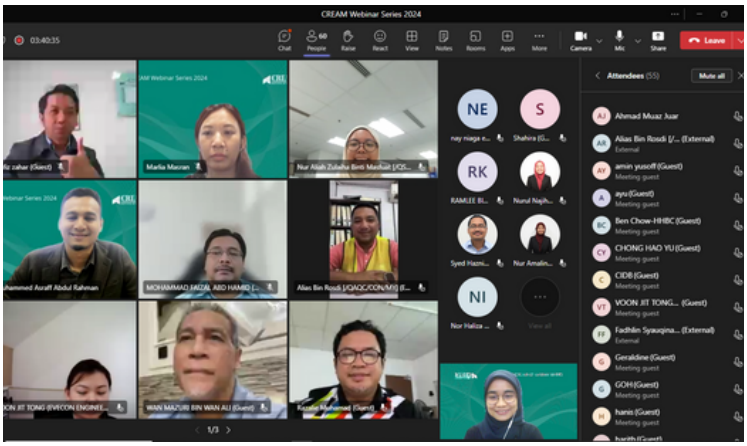
During the visit, we were guided through the various stages of production, from material preparation to the final assembly. Engaging with the engineers and technicians at IJM IBS enabled us to delve into their quality control measures and safety protocols, deepening our understanding of how prefabricated concrete components can seamlessly integrate into our research projects.

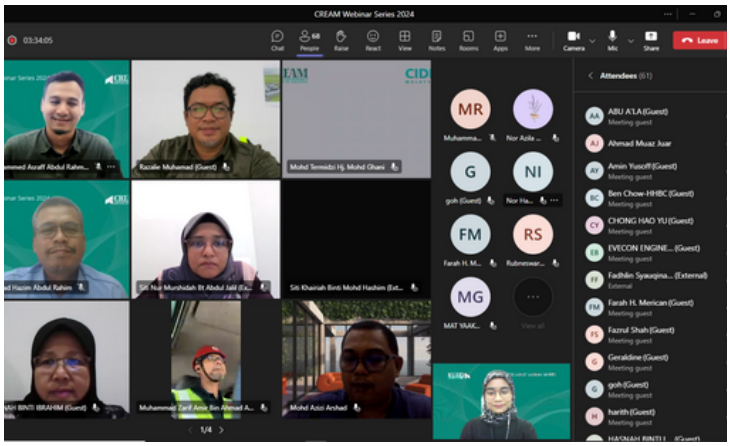
The visit to IJM IBS proved instrumental in gathering essential information and knowledge regarding the production process and capabilities of prefabricated concrete components. Moreover, it assisted us in evaluating the feasibility and suitability of incorporating prefabricated concrete elements into our projects. Additionally, it opened avenues for potential collaboration with IJM IBS, paving the way for the integration of their products into our standard design protocols.

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 **"Penguatkuasaan ke atas Penggunaan Perancah dan Falsework untuk Meningkatkan Keselamatan di Tapak Bina."**





Session 1 : Pematuhan dan Penguatkuasaan Penggunaan Perancah dan Falsework di Tapak Bina.

30 January 2024

Speakers :

- En. Mohd Hafiz Zahar
  Pengurus, Bahagian Standard & Bahan Binaan, CIDB Malaysia
- En. Mohammad Faizal Abdul Hamid
  Pengurus Besar, Bahagian Pematuhan , CIDB Malaysia

No of participants : 71 pax

Session 2 : Pemeriksaan, Pengujian dan Pensijilan Perancah dan Falsework.

31 January 2024

Speakers :

- En. Muhammed Asraff Abdul Rahman
  Pengurus, Construction Research Institute of Malaysia (CREAM)
- En. Ahmad Hazim Abdul Rahim
  Pengurus, Construction Research Institute of Malaysia (CREAM)
- Ts. Syed Hazni Abd Gani
  Pengurus, Construction Research Institute of Malaysia (CREAM)

No of participants : 60 pax

CREAM-MKRM Sabah Laboratory Visit
Date : 14 February 2024
Venue : Makmal Kerja Raya Malaysia, Kota Kinabalu, Sabah

On February 14, 2024, CREAM MKRM Sabah welcomed a delegation from the Sabah Sewerage Services Department (JPP), led by Ir Hj Mohd Nadzree Imran, Deputy Director of the Operations and Maintenance Sector.

The primary objectives of the visit were to explore potential future collaborations and to gain insights into our testing facilities and services. The visit offered the delegation a comprehensive understanding of the cutting-edge technology currently being offered by CREAM MKRM Sabah.

JPP is currently engaged in multiple sewerage projects, necessitating a structured process for assessing Quality Assurance and Quality Control (QAQC) in their developments. By establishing CREAM MKRM Sabah as an accredited testing facility for construction materials, government agencies like JPP stand to benefit significantly, particularly in meeting CIDB Malaysia's requirements for all their construction projects.

The team at CREAM-MKRM Sabah was privileged to host JPP at our laboratory, and we eagerly look forward to fostering a fruitful and successful working relationship in the future.

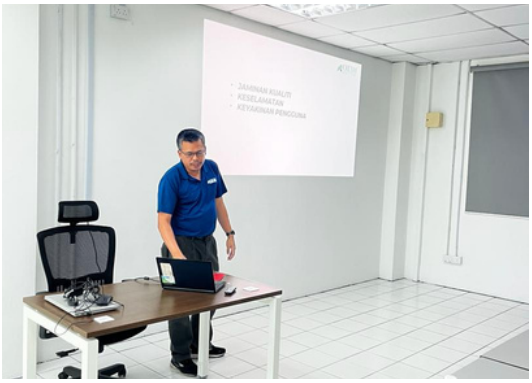
Seminar CIS 29:2021 Contractor's Quality Management System, Kota Kinabalu, Sabah

Date : 15 February 2024

Venue : Makmal Kerja Raya Malaysia, Kota Kinabalu, Sabah

CREAM has successfully organized the Seminar CIS 29:2021 Contractor's Quality Management System on February 15, 2024. The seminar was held in CREAM MKRM Sabah marks the first ever a physical event being held at the venue. The primary objective of this seminar was to introduce CQMS auditing and provide a comparative analysis with relevant ISO standards. CQMS stands as an independent system designed to assess the implementation of quality management systems for contractors, aligning with the stipulated requirements of this standard. The seminar received significant interest from industry players, with 36 participants registering for the event.

The full day seminar encompassed four sessions with Ir M. Ramuseran, Chief Executive Officer (CEO) of CREAM, played a pivotal role in ensuring the success of the event. He delivered an introductory presentation on CQMS (CIS29:2021). Following this, Ts. Syed Hazni Abd. Gani, Manager of the Centre for Quality Assurance and Certification (CQAC), presented on CIS 29:2021 CQMS Process and Product Certification, along with Construction Product Approval (CPA). Additionally, Mr. Ahmad Hazim Abdul Rahim, Manager of Makmal Kerja Raya Malaysia (MKRM), presented a paper focusing on MKRM testing services and CIDB regulatory requirement.



The seminar served as a platform for contractors to explore the benefits of registering for CQMS, highlighting its advantages over traditional ISO 9001 certification in terms of cost-effectiveness. Overall, the Seminar CIS 29:2021 Contractor's Quality Management System in Kota Kinabalu, Sabah, fostered meaningful discussions and collaborations aimed at elevating quality standards within the contractor community.

Townhall Meeting MAFM

Date : 21 February 2024

Venue : UTM Hotel and Residences, Kuala Lumpur

In February 2024, Ir. Ts. Dr. Hj. Mohd Khairolden Ghani, the manager at CREAM, moderated a session at the MAFM (Malaysian Association of Facilities Management) townhall held at UTM KL (Universiti Teknologi Malaysia Kuala Lumpur). This townhall featured three distinguished speakers from the Facilities Management (FM) industry, who shared their insights on industry trends and future directions. The event provided a platform for over 90 delegates from various FM industry players to stay updated on the latest developments and trends for 2024 and beyond.

The townhall served as a vital gathering for industry professionals to exchange ideas, network, and gain valuable insights into the evolving landscape of Facilities Management. Some potential themes and discussions that may have occurred during the moderated session include:

- **Technology Integration in FM:** Speakers discussed the growing role of technology, such as IoT (Internet of Things), AI (Artificial Intelligence), and data analytics, in enhancing FM operations. Topics included smart building management systems, predictive maintenance, and leveraging data for improved decision-making.
- **Workplace Evolution:** With changes in work environments due to factors like remote work trends and hybrid work models, discussions focused on adapting FM strategies to support flexible workplaces. Topics included space optimization, workplace technology solutions, and enhancing employee experience.
- **Resilience and Risk Management:** Speakers addressed the importance of resilient FM strategies in the face of risks such as cybersecurity threats, natural disasters, and global health crises. Topics included business continuity planning, emergency response protocols, and integrating resilience into FM practices.
- **Skills and Talent Development:** Discussions highlighted the significance of skilled professionals in driving innovation and growth in the FM sector. Topics included talent development strategies, upskilling initiatives, and fostering leadership capabilities within the industry.

Industry Collaboration and Partnerships: The session emphasized the importance of collaboration among FM stakeholders, including facility managers, service providers, and technology vendors. Speakers discussed collaborative frameworks, industry standards, and the potential for cross-sector partnerships to drive industry advancement.

Overall, the session at the MAFM townhall provided a platform for meaningful discussions and insights into the evolving landscape of Facilities Management. It set the stage for industry players to navigate challenges and seize opportunities in 2024 and beyond.

Engagement Session with Sarawak's Contractors on The Enhancement of Contractor Capability and Capability Assessment Program Certification (SCORE)

Date : 21 February 2024

Venue : Pullman Hotels and Resorts, Kuching, Sarawak

An engagement session with contractors from Sarawak was convened at Pullman Hotels and Resorts, Kuching, as part of the feedback process aimed at enhancing the existing SCORE CIDB program. Moderated by Ts. Dr. Ihfasuziella Ibrahim and Mr. Mhd. Jumain Mapplati, researchers from CREAM, the session aimed to collate information and gather feedback from contractors ranging from G2 to G7 levels.

The Contractor Capability and Capability Assessment Program Certificate (SCORE) is a specialized initiative established in 2017 by the Construction Industry Development Board (CIDB) in collaboration with the Small and Medium Enterprises Corporation Malaysia (SME Corp). SCORE's objective is to evaluate the capabilities of both local and foreign contractors in Malaysia, with the aim of improving the quality, safety, and professionalism within the construction industry.

Thirty-three (33) contractors based in Sarawak attended the event. CREAM also extended invitations to Green Source Energy Sdn Bhd, Gabungan Binaan Jurutenaga Sdn Bhd, and Konsortium URW Sdn Bhd, all of which have been awarded a 4-star rating under the SCORE program. Representatives from these organizations actively participated, sharing valuable insights and suggestions for enhancing the SCORE program. All feedback provided was meticulously gathered and synthesized to inform future improvements to the program.

CREAM extends its gratitude to Persatuan Kontraktor Melayu Malaysia (PKMM) Sarawak and Persatuan Kontraktor Infrastruktur & Pengurusan Fasiliti Bumiputera (PKIFB) Sarawak for their assistance in ensuring the success of this engagement session. Their support was invaluable in facilitating meaningful dialogue and fostering collaboration among industry stakeholders.

MS ISO/IEC 17020:2015 Accreditation Pre-Assessment Audit

Date : 22 - 23 February 2024

Venue : CREAM, Level 14, CIDB 520, The MET Corporate Towers

CREAM, a prominent research institute in Malaysia's construction sector, understands the crucial role inspections play in ensuring construction project quality and safety. With a goal to elevate construction standards, CREAM is working towards obtaining MS ISO/IEC 17020 accreditation. This demonstrates CREAM's commitment to excellence and adherence to global standards. Over the past year, CREAM has made significant progress in this accreditation journey, completing half of the required steps. Through rigorous assessments and audits conducted by DSM, CREAM is striving to meet and exceed standard compliance requirements.

Objective of MS ISO/IEC 17020:2015

Accreditation MS ISO/IEC 17020:2015 is a Malaysian version of an internationally recognized standard managed by DSM. It sets out criteria for inspection bodies' competence, ensuring impartiality and consistency in inspections. Accreditation under this standard validates an organization's technical expertise, impartiality, and reliability in conducting inspections. Adhering to MS ISO/IEC 17020 demonstrates an organization's dedication to quality, instilling confidence in stakeholders.

Challenges after the Pre-Assessment Audit

On February 22 - 23, 2024, CREAM underwent a pre-assessment audit conducted by DSM to assess readiness and compliance with accreditation requirements. This preliminary audit helps identify any gaps or areas for improvement in CREAM's inspection processes, documentation, and quality management systems. By addressing deficiencies beforehand, CREAM can ensure it meets MS ISO/IEC 17020 criteria. The audit aims to provide valuable insights and feedback to enhance systems and procedures, identify areas of weakness, and strengthen the overall Quality Management System (QMS). It also boosts confidence among CREAM's team, validating readiness for formal accreditation.

Conducting a pre-assessment audit of ISO/IEC 17020 streamlines the accreditation process, reduces non-compliance risk, and enhances credibility as a competent inspection body. It fosters a culture of continuous improvement, encouraging organizations to refine practices to meet evolving standards. Ultimately, the audit is a strategic investment in quality assurance, paving the way for successful accreditation and enhancing CREAM's reputation in the industry.

Finalization of Focus Group Discussion on Training Needs Analysis (TNA) For Contractor Management Course with Experts (SME)

Date : 28 February - 1 March 2024

Venue : Santa Grand Signature Hotel, Kuala Lumpur

Training Needs Analysis (TNA) is a process that evaluates the specific type and level of training programs required. It serves as a methodical approach to gather data and information, essential for designing and implementing effective training and development programs tailored to the needs of both organizations and individuals.

A three-day validation workshop on TNA contractor management courses took place at Santa Grand Signature Kuala Lumpur from February 28th to March 1st, 2024. Organized by CIDB Holding Sdn. Bhd and the Contractor Development Division of CIDB, the workshop enlisted the expertise of CREAM as a subject matter expert (SME). Professional bodies, private sector representatives, and government officials totaling 10 participants were also invited to contribute.

The workshop aimed to validate the findings of the contractor management courses across three categories: building, civil, and mechanical and electrical. It facilitated open communication and dialogue, fostering consensus among participants. Decisions were made regarding the proposed actions stemming from the TNA, whether to continue, improve, or terminate the courses. CIDB offered a total of 132 contractor management courses, including 29 for building, 43 for civil, 23 for mechanical, 35 for electrical, and 2 for facilities.

Ultimately, the workshop yielded positive outcomes, affirming the importance of contractor management courses in the construction industry. It is anticipated that this outcome will contribute to enhancing the quality of contractors in the future.

CREAM-MKRM Kuala Lumpur Laboratory Visit
Date : 29 February 2024
Venue : Makmal Kerja Raya Malaysia, Kuala Lumpur

We were delighted to host representatives from CIDB Negeri Perak, Yayasan Perak, and Lembaga Perumahan & Hartanah Perak at our CREAM-MKRM Kuala Lumpur on February 29, 2024.

The main aim of the visit was to acquaint our guests with our testing facilities and services while also exploring potential avenues for future collaboration. The visit proved to be exceptionally fruitful, offering our visitors valuable insights into the state-of-the-art technology available at CREAM MKRM.

We extend our heartfelt gratitude to all those who attended, as your presence greatly contributed to the success of this visit. The entire team at CREAM-MKRM was thrilled to have the opportunity to host you in our lab, and we eagerly anticipate the possibility of working together in the near future.

If you wish to schedule a visit to CREAM-MKRM, please don't hesitate to contact us at marketing@cream.my. We would be more than happy to arrange a tour for you.

Development of Framework on Monitoring and Implementation for IBS Private Projects by CIDB as "Agensi Teknikal Luaran" (ATL) during Building Plan Approval.

Date : 11 January, 26 - 27 February and 29 February 2024

Venue : Kuala Lumpur

The rapid advancement of technology has significantly transformed Malaysia's construction sector landscape over the years. As the regulatory body for the national construction industry, the Construction Industry Development Board (CIDB) of Malaysia strongly advocates for the adoption of technology to propel the sector towards world-class standards and enhanced competitiveness. In this pursuit, CIDB has been steadfastly promoting the widespread adoption of Industrialized Building Systems (IBS), particularly in building construction, to expedite project completion, enhance productivity, and elevate the quality of work.

The government acknowledges the manifold benefits and potential of IBS, underscoring its significance in policy frameworks aimed at fortifying Malaysia's construction industry. The National Construction Policy 2030 (NCP 2030), launched in 2021 by the Ministry of Works, stands as a testament to this commitment. With a thematic focus on "Digitalization of the Construction Sector" under Thrust 3: Improve Construction Productivity, the policy advocates for leveraging new technologies like IBS and Building Information Modeling (BIM) to bolster construction productivity. Additionally, the National Affordable Housing Policy (DRMM) 2018-2028, a sub-policy by the Ministry of Housing and Local Government (KPKT), targets the construction of one million units of Affordable Housing utilizing IBS by 2028. This underscores the government's dedication to implementing and coordinating IBS-centric construction projects, particularly in the realm of affordable housing.

In a recent development, during the 80th Meeting of the National Council for Local Government (MNKT) in June 2023, consensus was reached to enhance the existing monitoring mechanism for IBS. This initiative was proposed by the Ministry of Works and championed by CIDB, with a focus on strengthening the implementation mechanism of IBS in the private sector construction industry. As part of this effort, a minimum IBS score of 70 has been mandated for building plan applications for private projects submitted to State Authorities (PBN) and Local Authorities (PBT), provided they meet the specified criteria:

i. New building projects valued at RM50 million and above; and
ii. Gross Floor Area (GFA) of 50,000 m2 and above.

In its role as the monitoring agency for IBS implementation, CIDB has appointed CREAM, effective September 2023, to develop a Framework for Monitoring and Implementation of IBS in Private Projects by CIDB as an "Agensi Teknikal Luaran" (ATL) during the Building Plan Approval process. Several engagement sessions and workshops have been conducted, involving key stakeholders from various sectors, including CIDB Technology Development Sector, Enforcement Sector, Legal Office, CIDB IBS, and Jabatan Kerajaan Tempatan (JKT) KPKT. These sessions aim to ensure that the Standard Operating Procedure (SOP) developed by CIDB aligns seamlessly with OSC 3.0 Plus, an integrated system for Development Plan applications used by PBT under KPKT. It is anticipated that the SOP for monitoring and implementing IBS for Private Projects by CIDB as ATL will be finalized by mid-2024.

Development of Framework on Monitoring and Implementation for IBS Private Projects by CIDB as "Agensi Teknikal Luaran" (ATL) during Building Plan Approval.

Date : 11 January, 26 - 27 February and 29 February 2024

Venue : Kuala Lumpur

Coordination Workshop with CIDB's Enforcement Sector

Date : 11 January 2024

Venue : Meeting room, Makmal Kerja Raya Malaysia, CREAM

Validation Workshop

Date : 26-27 February 2024

Venue : Sunway Putra Hotel Kuala Lumpur

Validation Workshop with Jabatan Kerajaan Tempatan (JKT)

Date : 29 February 2024

Venue : Seminar room, Level 11 Sunway Putra Tower Kuala Lumpur

Technical Visit from the Ministry of Economy and the Malaysia Productivity Corporation (MPC) to Makmal Kerja Raya Malaysia (MKRM)

Date : 1 March 2024

Venue : Makmal Kerja Raya Malaysia, Kota Kinabalu, Sabah

A technical visit by representatives from the Ministry of Economy and the Malaysia Productivity Corporation (MPC) to Makmal Kerja Raya Malaysia (MKRM) Sabah occurred on March 1, 2024, to assess the progress of the construction of the new Structural Testing Laboratory in Sabah. This visit marks a significant milestone, highlighting the Government of Malaysia's keen interest and support for the project. Led by Mr. Surrendren Sathasivam, Director of the Ministry of Economy's Service Industry, and Dr. Mohamad Norjayadi Tamam, Deputy Director General of MPC, the visit underscores the government's commitment to the project's development.

Established under the Twelve Malaysia Plan (RMK-12) through CIDB Malaysia, MKRM Sabah commenced operations in November 2022. The primary objective is to expand CREAM's involvement in testing and certification for the construction industry, thereby enhancing the capabilities of industry players in Sabah to meet the requirements of the CIDB Certificate of Standard Compliance (PPS).

The development of the Structural Testing Laboratory is part of a comprehensive five-year program, with construction currently in progress. Upon completion, the laboratory will be equipped with specialized facilities for full-scale structure and component testing, including IBS Components. Key features will include a robust floor measuring 12m x 12m and a loading testing capacity of up to 1000 kN (100 tonnes). Additionally, the lab will accommodate essential tests for scaffolding and falsework, necessitating full-scale structure testing.

During the visit, Mr. Ahmad Hazim Abdul Rahim, the Laboratory Manager at MKRM, provided a detailed update on the project's status. The meeting also saw the participation of CIDB Negeri Sabah, led by State Director Mr. Nazri Zakaria. Following the briefing, a comprehensive Q&A session ensued, fostering engagement and knowledge sharing among all relevant stakeholders.

Once operational, MKRM Sabah will signify a significant milestone for CREAM, contributing to the advancement of construction practices and standards in Sabah. The project underscores a steadfast commitment to innovation and excellence in the construction industry while aligning with all CIDB initiatives. The ongoing monitoring and support from the visiting delegation reaffirm a dedication to ensuring the project's success and its positive impact on the construction sector in the region.

CREAM and YTL Cement Berhad Transition to MoA, Cementing Partnership with RM 1 Million Research Grant

Date : 5 March 2024

Venue : Bilik Lembaga, Level 28, CIDB 520, The MET Corporate Towers

On March 5, 2024, CREAM and YTL Cement Berhad took a significant step forward by signing a Memorandum of Agreement (MoA). The exchange of this MoA between Deputy Chairman of CREAM, YBhg. Dato' Sr. Mohd Zaid Zakaria, and YBhg. Dato' Sri Michael Yeoh, Managing Director of YTL Cement Berhad, solidified their commitment to a partnership transition from a Memorandum of Understanding (MOU) to the MoA.

With a focus on a RM 1 million research grant, both parties affirmed their dedication to clarity and collaboration. The signing ceremony took place during the 3rd steering committee meeting at CIDB's new office, CIDB 520, The MET Corporate Towers.

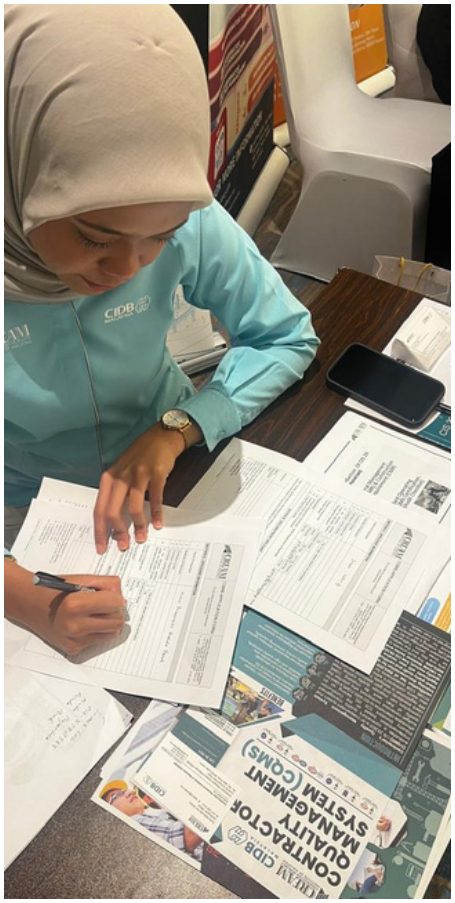
Program Jelajah BINA Townhall se-Malaysia (Zon Utara)
Date : 5 March 2024
Venue : Bertam Resort, Pulau Pinang

CREAM was honored to be invited to showcase our products and services at the Program Jelajah BINA Townhall se-Malaysia (Zon Utara) event, held at Bertam Resort Pulau Pinang on March 5, 2024.

This event, organized by CIDB IBS Sdn Bhd in collaboration with CIDB Negeri Pulau Pinang, aimed to disseminate the latest policy information regarding compliance with construction projects utilizing the Industrialized Building System (IBS) to local authorities and industry players. This initiative stems from the decision made during the 80th Meeting of the National Council for Local Government (MNKT-80) held on June 14, 2023.

Our esteemed researcher, Sr. Yusrin Faiz Abd Wahab, was invited as one of the speakers at the event. He delivered a presentation, sharing valuable insights on Construction Product Approval (CPA) and IBS Manufacturer & Product Assessment and Certification (IMPACT) services with the participants.

We are pleased to announce that CREAM will also be participating as an exhibitor at the upcoming Program Jelajah BINA Townhall se-Malaysia events in Sarawak and Sabah. We look forward to meeting you there!



Operasi Penguatkuasaan Bersepadu (OPB) dan Operasi Penguatkuasaan Khas (OPK) CIDB Negeri Sarawak Cawangan Bintulu

Date : 5 - 7 March 2024

Venue : Bintulu, Sarawak

From March 5th to 7th, 2024, CREAM actively participated in the Integrated Enforcement Operation (OPB) and Special Enforcement Operation (OPK) led by the CIDB Sarawak Bintulu Branch, targeting construction sites in the vicinity of Bintulu, Sarawak.

The operation, spearheaded by 48 CIDB enforcement officers from the Sarawak State and its branches, alongside representatives from subsidiary organizations and five additional enforcement agencies including the Royal Malaysian Police (PDRM), BOMBA, Malaysian Immigration Department (JIM), Bintulu Divisional Health Department (KKM), and the Board Bintulu Development (BDA), took place on March 5th, 2024, at the Bintulu Vocational College construction site, valued at RM 21.5 million.

Subsequently, on March 6th, 2024, 22 CIDB enforcement officers from the Sarawak State and its branches, together with subsidiary personnel, conducted a Special Enforcement Operation (OPK) at the "Onshore Gas Plant for the Rosmari Marjoram Project," valued at RM 3.03 billion.

Continuing the effort on March 7th, 2024, operations persisted at the construction site of the manganese alloy smelting processing plant (Sakura Ferroalloys) project, valued at RM 130.9 million, located in the Samalaju Industrial Park, Bintulu.

CREAM played a pivotal role alongside CIDB in enforcing Act 520, Fourth Schedule, which governs CIDB Act 520 Compliance related to building materials. The collaboration between CREAM and CIDB enforcement officers aims to broaden its scope, raising awareness among industry stakeholders about the imperative of Act 520 compliance for enhancing the quality and safety standards within the construction industry.

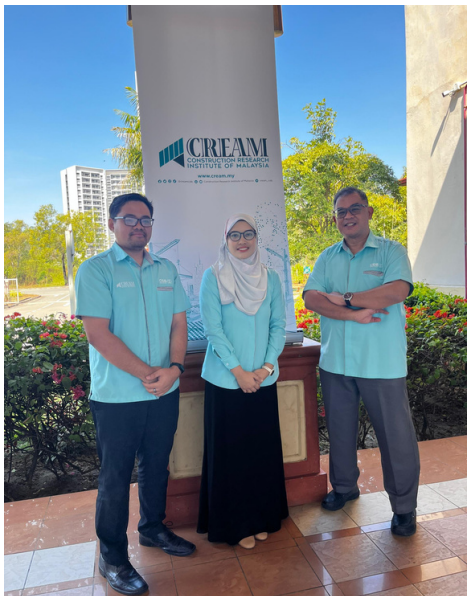
Seminar Pemantapan Kontraktor Pembinaan & JKR E-Tender (JET) Secara Amali Anjuran Bersama CIDB Malaysia Dan JKR Malaysia, Kota Kinabalu, Sabah

Date : 7-8 March 2024

Venue : Wisma Wanita, Kota Kinabalu Sabah

The Department of Public Works (JKR) Labuan, in collaboration with CIDB Malaysia, successfully hosted the "Seminar on Contractor Strengthening & JKR E-Tender (JET)" at Wisma Wanita, Kota Kinabalu, Sabah, spanning two consecutive days on March 7th and 8th, 2024. The primary objective of this event was to enhance the capabilities of construction contractors and raise awareness regarding construction quality in accordance with Act 520, as outlined by CIDB Malaysia. Additionally, the seminar aimed to educate contractors on the utilization of the JKR e-tender platform for projects implemented by JKR Malaysia.

The inauguration of the seminar was led by Dato' Sr. Mohd Zaid bin Zakaria, Chief Executive of CIDB Malaysia, with Ir. Mr. Mohd Faizul bin Mohd Ali Hanapiah, Director of JKR Labuan WP, Mr. Nazri Zakaria, Sabah State CIDB Director, Mr. Rosmen Ag Hassan, Director of CIDB Sarawak, and Mr. Mohd Nasruddin bin Datuk Dr. Mohd Yaakub, Chairman of the Malaysian Malay Contractors Association (PKMM) - Sabah, as esteemed guests of honor.



During the seminar, Pn. Nor Azila binti Maulihasan, the representative from CREAM MKRM Sabah, delivered a presentation on CREAM's technical services. Her presentation emphasized laboratory testing, Construction Quality Management System (CQMS), and Assessment Programmes focused on Safety, Health, Environment, and Quality. CREAM MKRM Sabah also actively engaged with local contractors by showcasing its services at the CIDB booth.

This collaborative effort between CREAM, JKR, and CIDB proved to be mutually beneficial, fostering a positive impact for all parties involved. It facilitated a clearer understanding of each entity's role and encouraged cooperation for future endeavors within the construction industry. Gratitude was extended to JKR Labuan for providing the platform and opportunity to participate in the seminar, which significantly contributed to its success.

Visit CREAM and YTL Cement to Singapore

Date : 7-8 March 2024

Venue : Singapore

CREAM and YTL Cement embarked on a visit to Singapore from March 7th to 8th, 2024, with a focus on the sustainable management of construction and demolition waste. This visit was a key component of their collaborative efforts, falling under Workstream 3, where both entities delved into sustainable management practices concerning construction debris and demolition waste.

a) *Building Construction Authority (BCA)*

The delegation comprised Ir. Ts. Dr. Hj Mohd Khairolden Ghani and Mr. Mhd. Jumain Mapplati from CREAM, alongside representatives from YTL Cement, including Madam Clarisse Loh, Ir. Ts. Billy Low Tau Jian, and Mr. Ng Ming Kwong.

Throughout the visit, the delegation engaged in fruitful discussions and visited several pivotal locations, including:

- Building Construction Authority (BCA)
- Samwoh Corporation
- Centre of Building Research, Housing & Development Board (HDB)
- Demolition sites and RCA Crushing Plant

This immersive experience provided invaluable insights to CREAM and YTL Cement, particularly through dialogues with BCA concerning low-carbon construction and demolition protocols. Moreover, it facilitated knowledge sharing on construction and demolition waste management, offering perspectives relevant to Malaysia's context.

c) Centre of Building Research, Housing & Development Board (HDB)

b) Samwoh Corporation

d) Demolition sites and RCA Crushing Plant)

Visit to Starken Autoclaved Aerated Concrete (AAC) Factory

Date : 11 March 2024

Venue : Starken AAC Sdn Bhd (Factory) Serendah, Selangor

In the dynamic realm of construction, the pursuit of innovative materials and techniques to bolster efficiency and sustainability is an ongoing endeavor. Recently, the Construction Research Institute of Malaysia (CREAM) partnered with Tenaga Nasional Berhad Research (TNBR) to embark on a visit to Starken, one of Malaysia's foremost manufacturers of Autoclaved Aerated Concrete (AAC). This visit aimed to illuminate the manufacturing process and showcase products tailored to meet the demands of contemporary construction projects.

The journey commenced with a guided tour of the AAC factory, where intricate machinery hummed in rhythmic harmony, deftly transforming raw materials into lightweight yet durable AAC blocks and panels. The precision and efficiency inherent in the manufacturing process captivated visitors as they observed the metamorphosis of sand, lime, cement, and aluminum powder into sturdy building components.

At the heart of the visit was the exploration of AAC products. Participants marveled at the versatility of AAC blocks and panels, which are ideal for applications requiring thermal insulation, fire resistance, and structural integrity. Discussions centered around the unique attributes of AAC, such as its lightweight nature, ease of handling, and exceptional thermal performance – all crucial factors in design and construction.

The visit facilitated collaborative engagement among industry professionals, manufacturers, and project stakeholders. Conversations delved into customization options, project-specific requirements, and the seamless integration of AAC solutions into TNB substation designs. The exchange of insights and expertise enriched participants' understanding of AAC's applicability and its potential contributions to substation construction projects.

Advancing Quality Standards: CIS 29:2021 Contractor's Quality Management System, Kuching, Sarawak

Date : 14 March 2024

Venue : Bilik Gerakan Kompleks CIDB Kuching Sarawak

On March 14, 2024, CREAM-MKRM Sarawak orchestrated a seminar dedicated to elevating quality standards within the construction industry. At the forefront of discussion was the Contractor's Quality Management System (CQMS) CIS 29:2021, an autonomous framework designed to evaluate the implementation of quality management by contractors, based on the Construction Industry Standard (CIS 29). The seminar offered invaluable insights into the application and advantages of CQMS, emphasizing its pivotal role in bolstering project management, upholding quality control, and meeting client expectations.

Under the guidance of Ir. M. Ramuseren, the seminar encompassed various facets of CQMS, offering practical advice on its application and compliance with CIS 29. Through engaging discussions and the exchange of experiences, participants cultivated a collaborative environment conducive to learning and knowledge sharing.

Key highlights of the seminar included:

- An introductory session on CQMS, providing an overview of its functionality, the advantages of implementation, and its significance in ensuring efficacy and standardization within the construction industry. This session laid the groundwork for a deeper understanding and implementation of CQMS.
- Detailed explanations of the requirements for CQMS compliance and certification, accompanied by practical guidance to assist participants in navigating the certification process. A thorough comprehension of CQMS CIS 29 is essential for contractors seeking to enhance their quality management systems and gain a competitive edge in the market.

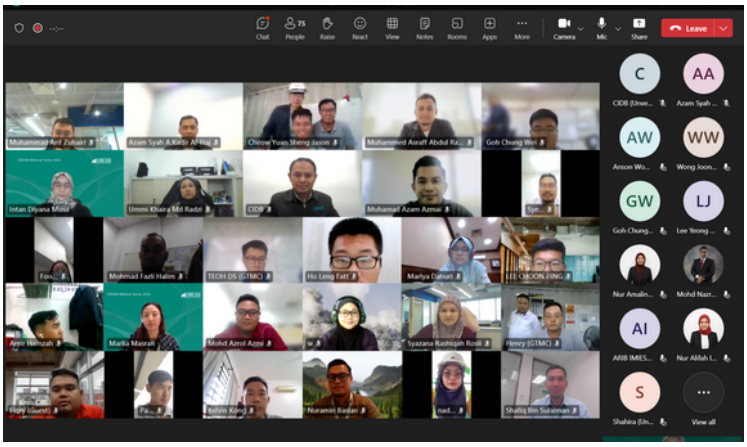
The seminar hosted by CREAM-MKRM Sarawak acted as a catalyst for the advancement of CQMS CIS 29 within the construction sector. By equipping participants with the knowledge needed to effectively implement CQMS, the seminar contributes to improving project outcomes, mitigating risks, and ultimately ensuring client satisfaction. Throughout the event, participants demonstrated keen interest in CQMS CIS 29, resulting in a successful seminar. In conclusion, the seminar underscored the importance of adopting CQMS as a viable option for quality management in construction.

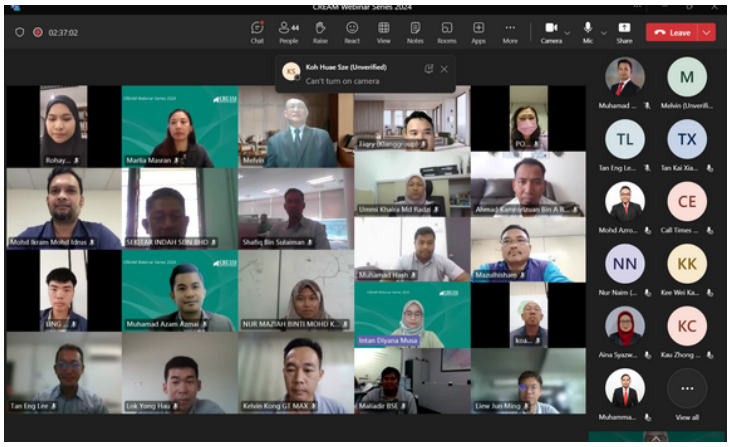



CREAM Webinar Series 2024

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 **"Building Brilliance: QLASSIC and SHASSIC Soar for Construction Quality, Safety, and Health."**





Session 1 : Setting the Standard for Construction Quality, Safety, and Health via QLASSIC and SHASSIC

20 March 2024

Speakers :

- En. Muhammad Faiz Musa
  Manager, Construction Quality Unit, CIDB Malaysia
- En. Azam Syah A. Kadir
  Asst Engineer, Construction Quality Unit, CIDB Malaysia

No of participants : 62 pax

Session 2 : Best Quality and Safety Practices in Construction

27 March 2024

Speakers :

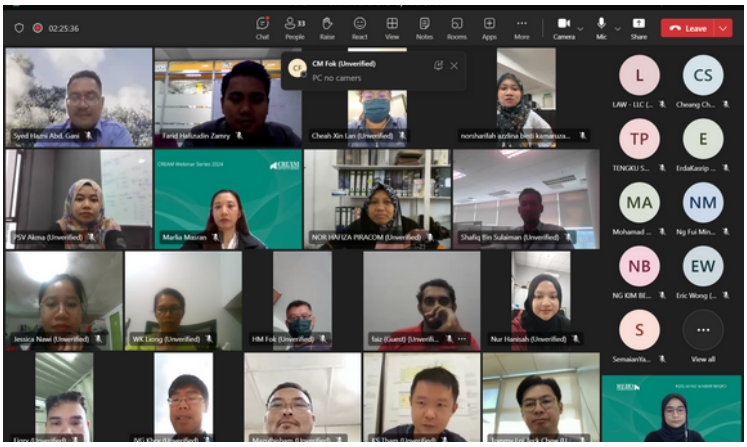
- En. Tan Eng Lee
  Site Agent, Kitacon Sdn Bhd
- En. Melvin VL Yong
  Project Health Safety Environment Manager,
  China Communications Construction Company (M) Sdn Bhd

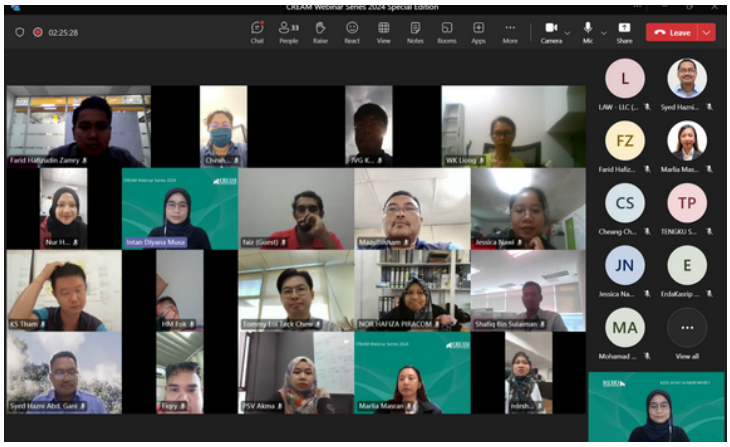
No of participants : 43 pax

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.

For March 2024, we have organised a Special Edition session **"Contractor's Quality Management System (CQMS)- Alternative to ISO 9001".**





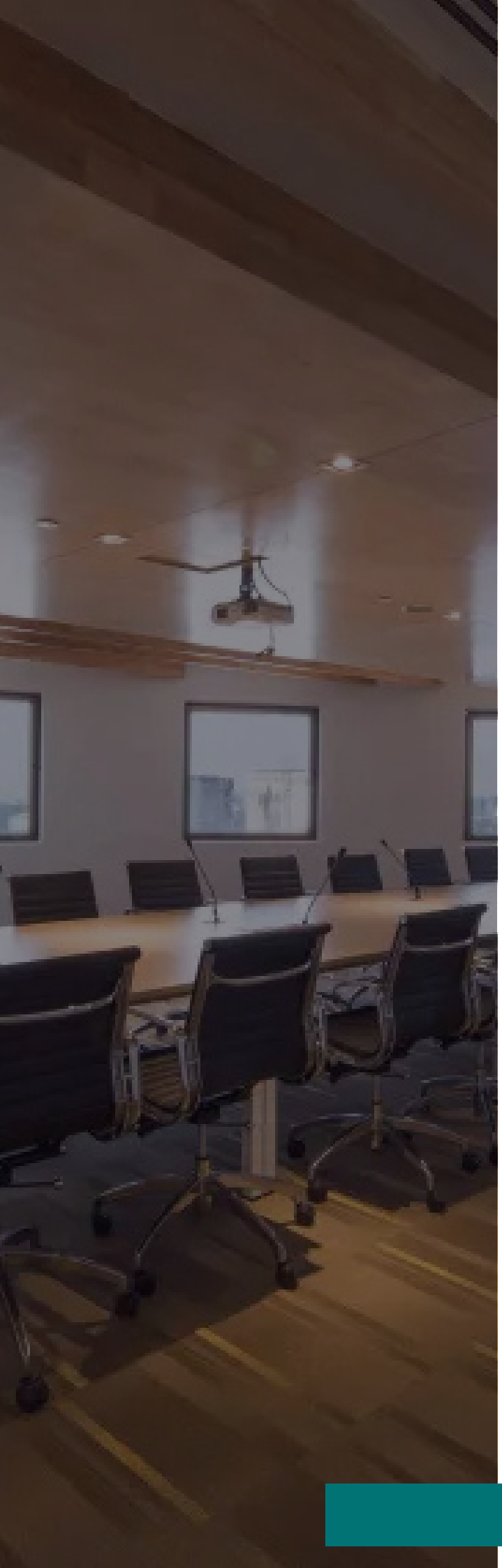
Special Edition : Contractor's Quality Management System (CQMS)- Alternative to ISO 9001

26 March 2024

Speakers :

- Ts. Syed Hazni Abd Gani
  Manager, Construction Research Institute of Malaysia (CREAM)
- En. Farid Hafizudin Zamry
  Certification Officer, Construction Research Institute of Malaysia (CREAM)

No of participants : 30 pax



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