ISSUE 7 - JULY 2023

CREAM
CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA

CREAM

e-magazine

- Refining the Basic of Measurement
- The Hike in Compliance Cost and How It Impacts the Housing and Property Industry
- Testing Facilities Available at CREAM-MKRM
- Statistics on QLASSIC and SHASSIC Assessments
- Highlights on July Activities

editorial team

Editor-in-chief
Ir. M. Ramuseren

Managing Editor
Ts. Intan Diyana Musa

Executive Editor
Marlia Masran

Writers/Contributing Editors
Ts. Yuzairy Rozaidi Rohaizan
Ahmad Hazim Abdul Rahim
Muhamad Azam Azmai
Ts. Syed Hazni Abd. Gani
Aina Syazwani Azhar
Maria Zura Mohd Zain
Mohd. Ikhwan Abdullah
Ts. Dr. Ihfasuziella Ibrahim
Nor Azila Maulihasan
Hassanain Hafiz Mohd Asnan
Masturina Bohi
ChM. Siti Aishah Ishak
Sr. Yusrin Faiz Abd Wahab

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

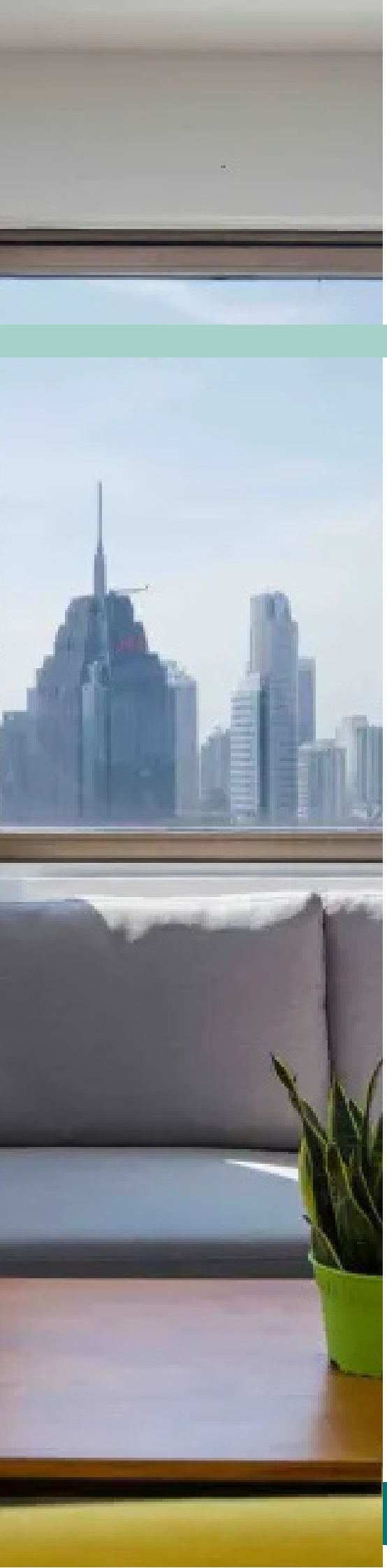
To meet the strategic needs of Research and Development in the Malaysian construction industry. CREAM is also committed to build partnerships with the industry's stakeholders and researchers while exploring and encouraging the development of a knowledge-based industries as well as ready to meet current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

Refining the Basic of Measurement


by Ts. Yuzairy Rozaidi Rohaizan and Ahmad Hazim Abdul Rahim

The measurement of the dimensions of objects or samples, especially for construction materials, is the basic requirement for a product to abide by related international or local standards. Often times, dimension taking through measurement is the first testing requirement for a product before undergoing mechanical or chemical testing.

There is various metrology equipment for measuring purposes; basic ones such as the metre ruler, vernier callipers, or thickness gauges are often used as they are simple to operate; however, they come with limitations, including the need to take measurements and jot down data obtained manually. The equipment above reduces these uncertainties and eliminates human errors.

Hexagon Absolute Arm 7-Axis series

The portable Coordinate Measuring Machine (CMM), as the name implies, measures the distances of the points, or points of intersection, that exist on any plane normal to the object. Since objects are seen as 3-Dimensional (3D), CMM takes advantage of this through its cartesian coordinate system, for example, the object's XYZ axis. Points are taken using Ruby probes, and the coordinates of these points are logged into the software.

APPLICATION

Figure 1 shows a Concrete Sleeper Sample based on BS EN 13230-1:2016: Railway applications – Track – Concrete sleepers and Bearers subject to clause 6.1.1 Geometrical Design Requirements of Table 1.

Figure 1: Concrete Sleeper Sample

As seen in Figure 2, our team was able to extract its total length (see the yellow coloured dimension pull) with the help of the portable CMM. This was achieved through the CMM taking advantage of the object's cartesian coordinate system.

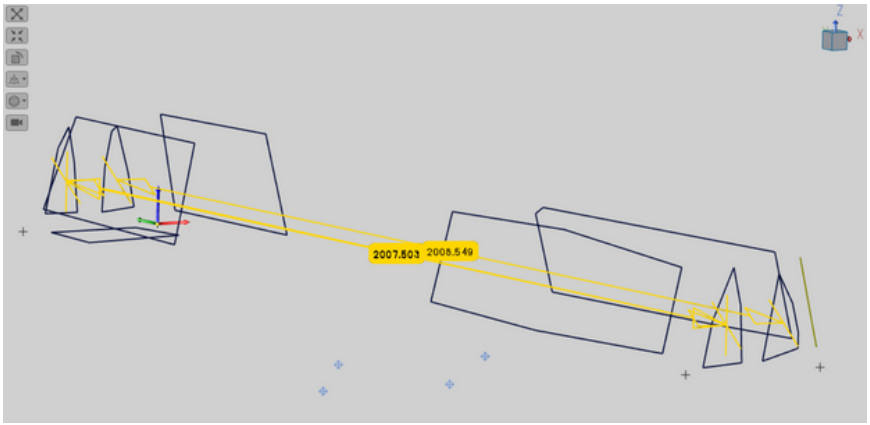


Figure 2: Concrete Sleeper Sample dimension existing in plane

There is no need to extract out the whole plane of the concrete sleepers, as the extracted planes (as in Figure 2) are able to intersect each other and the coordinate points are obtained (see the "+" point at the edge of the object). With these points, we are then able to obtain the object's dimensions. The software accompanied by the CMM is also capable of extracting the angle between two planes or points of the object.

With a working volume of 3 metres, our portable CMM is capable of measuring objects up to 6 metres in length and above. With the leapfrog accessories, where 4 points are used as reference points before relocating the portable CMM, longer and bigger objects could be measured.

In Makmal Kerja Raya Malaysia, we do not only limit the usage of the portable CMM to concrete sleepers but also other objects/products such as IBS precast concrete, scaffolding products, or geometrical-shaped construction materials up to micron-level accuracy.

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

The Hike in Compliance Cost and How It Impacts the Housing and Property Industry

by Centre for Advanced Construction Technology and Innovation Department, CREAM

Compliance cost refers to all the costs incurred to follow the relevant regulations. It includes compensation for compliance personnel, time and money spent on reporting, new systems needed to meet retention obligations, etc. The compliance cost is experiencing a hike in value as the number of regulations increases and more time is spent adhering to the regulations. It can be a significant burden, especially for Micro, Small, and Medium Enterprises (MSMEs). The issue may pose a severe threat to the Malaysian economy as a whole, as MSMEs play a vital role in the Malaysian economy. The total number of MSMEs in Malaysia as of 2021 is 1,226,494, representing 97.4 percent of the total business establishments in Malaysia. In the same year alone, SMEs contributed 37.4 percent to Malaysia's Gross Domestic Product (GDP). The MSMEs are made up of five main business sectors, including services, construction, manufacturing, agriculture, and mining and quarrying. The construction sector is the second-largest sector, with 98,274 firms. It contributes 3.7 percent to Malaysia's GDP. However, the increasing compliance cost also poses a significant challenge for the construction sector, particularly the housing and property industry.

Despite the high demand for housing properties following the increase in population in Malaysia, a total of 23.1 percent of the population will not own a house in the year 2020. The average annual housing production in Malaysia is 138,900 units, and yet there are still a lot of unsold units due to rising housing prices. The rising housing prices may be mainly due to cost factors. Besides that, the increase in interest rates and the Consumer Price Index (CPI) also contribute to the rise in housing prices.

There are four main issues surrounding the housing and property industry:

1. over-regulation adds to the cost but not necessarily the value of houses
2. overzealous planning requirements reduce sellable land
3. cross subsidies create price distortion
4. lengthy process of approval

The first issue stems from various laws, policies, guidelines, and standards being regulated in the Malaysian housing industry. New compliance is then imposed by separate agencies through regulations, policies, standards, etc. This led to high costs and limited supply, which subsequently created inflexibility to adapt to market changes. Nevertheless, the high costs do not necessarily add to the value of the house.

The second issue arises due to the reduction of sellable land due to the State's overzealous planning guidelines. This has directly increased the cost of land per unit area. One of the major compliances is the parking lot. The buyers will have to bear the cost even when they do not need it, as it is part of the housing price.

The third issue is then caused by the cross-subsidies, such as the Affordable Housing Quota and Bumiputera Quota, imposed by the government. Although the subsidies intend to help low-income individuals purchase a house, the high subsidies cause a price distortion. Often, the policy does not consider the real demand for the said locality, which will result in unsold units. The unsold quota units add to holding costs and maintenance service charges for strata. As of June 2020, there were 6,121 unsold Bumiputera Quota units in Malaysia, which resulted in a total holding cost of RM4.6 billion. The release of unsold quota units also involves a complicated and long process, which results in additional costs.

The fourth issue is the lengthy process of housing development approval. The uncertainty of project approval affects the planning and implementation, as well as the higher risks of rejection, additional holding costs, and expected higher returns during the selling process. This will then bore the buyers.

These issues will lead to high compliance costs. The costs range between 21.8 and 32.5 percent of the Gross Development Value (GDV). Compliance in any township or strata includes the conversion premium, development charges, capital contribution, other utility costs, cross-subsidies, holding costs, submission fees, titles, etc. It varies from project to project due to factors like location, types, sizes, and policies.

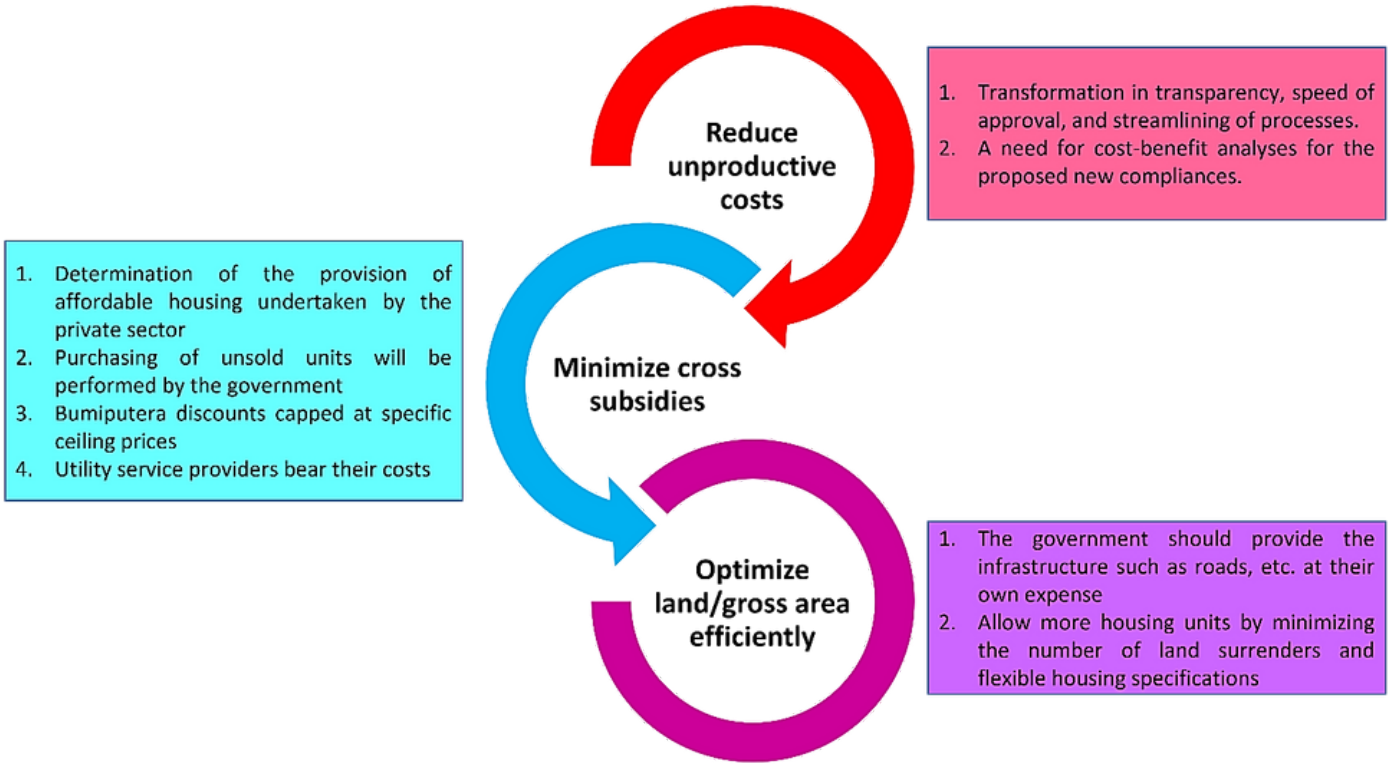
Hence, the Construction Industry Development Board (CIDB), in collaboration with the REHDA Institute and the Construction Research Institute of Malaysia (CREAM), has conducted a case study on 'Reduced Compliance Towards Lower Development Costs - Case Studies of Development Costs of Affordable Apartments.' The study aimed to encourage a better understanding of the compliance costs involved in the housing and property industry and how they affect price stability. It depicts an objective industry viewpoint and industry insights on the most pressing difficulties the sector is experiencing. It also offers practical advice from the industry's perspective on how to identify, control, and mitigate the issue of rising business costs to maintain house prices at a more sustainable level for future homebuyers.

The study was conducted in five housing locations, namely, Selangor (Rumah Selangorku) 1, Penang (Island – Private CSR Affordable Housing Project), Wilayah Persekutuan Kuala Lumpur (RUMAWIP), low-cost housing in Wilayah Persekutuan Kuala Lumpur (RUMAWIP), and Selangor (Rumah Selangorku) 2. It was observed that the building cost for most projects in these locations is around RM136 and above per square foot. A stand-alone development with all affordable units is not practical for the private sector when government-controlled prices are less than development costs since losses are absorbed by the development through a cross-subsidy component.

The cost can be reduced if the affordable housing plan is carried out on government land and the housing development is offered a higher density or plot ratio. Controlled pricing may result in a loss, which would need to be offset by revenue from other developments in open market segments. The reduction in capital or statutory contribution will also help to lessen some of the burdens on the costs. The utilisation of technology such as Building Information Modelling (BIM) may have a minimal impact on GDV. However, the authorities should speed up the approval process at the same time. As a result, the reduced compliance costs will lead to sustainable house pricing (15 to 28 percent lower). The price will be much lower where the land price is very high. The reduced cost will not only benefit the private sector but also the government. However, the cost reduction is only relevant if no more compliance obligations, requirements, or cost increases are introduced during the construction phase.

The cost can be reduced if the affordable housing plan is carried out on government land and the housing development is offered a higher density or plot ratio. Controlled pricing may result in a loss, which would need to be offset by revenue from other developments in open market segments. The reduction in capital or statutory contribution will also help to lessen some of the burdens on the costs. The utilisation of technology such as Building Information Modelling (BIM) may have a minimal impact on GDV. However, the authorities should speed up the approval process at the same time. As a result, the reduced compliance costs will lead to sustainable house pricing (15 to 28 percent lower). The price will be much lower where the land price is very high. The reduced cost will not only benefit the private sector but also the government. However, the cost reduction is only relevant if no more compliance obligations, requirements, or cost increases are introduced during the construction phase.

Three main transformational thrusts are recommended based on the case studies: reduce unproductive costs, minimise cross-subsidies, and optimise land or gross floor area efficiency. A structural reform of the existing regulations, requirements, and processes should be carried out by the relevant authorities to ensure more sustainable house prices in the future.



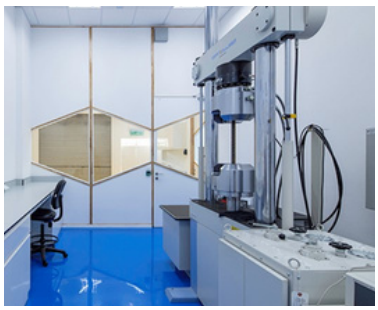
Testing Facilities Available at CREAM -MKRM

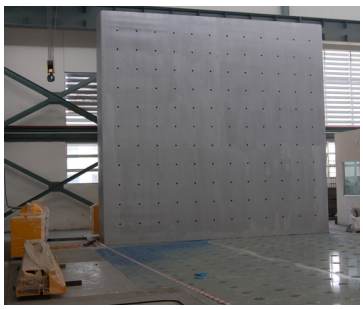
We offer over 10 years of experience, providing a broad range of services to clients around the globe. Our global testing facilities, staffed by knowledgeable and experienced personnel, help you to reduce risks, shorten time to market and demonstrate the quality and safety of materials, components, or products. Full scale structure testing is our main forte. We can test all type of structure, such as wall, slab. scaffolding, beam, railway component, etc. Other than that, we also offer a wide range of construction material testing services.

CREAM-MKRM is accredited to ISO/IEC 17025:2017 by Standards Malaysia for various scope.

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





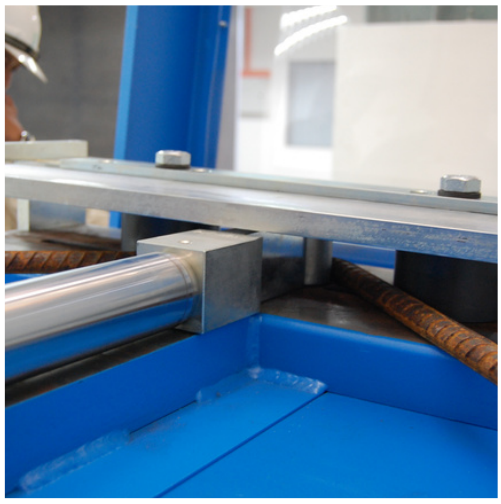
Scope and Testing Services

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



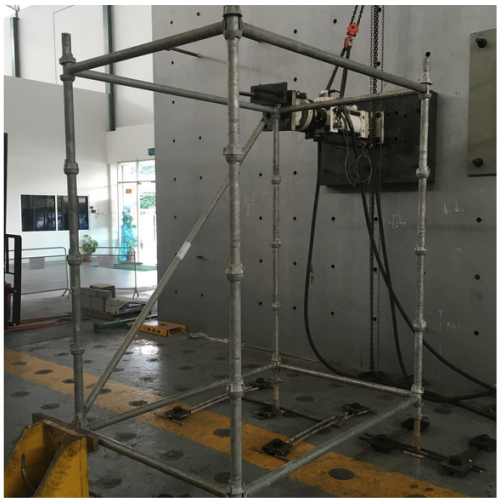
Scope and Testing Services

include but not limited to

SCAFFOLDING AND 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



Scope and Testing Services

include but not limited to

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

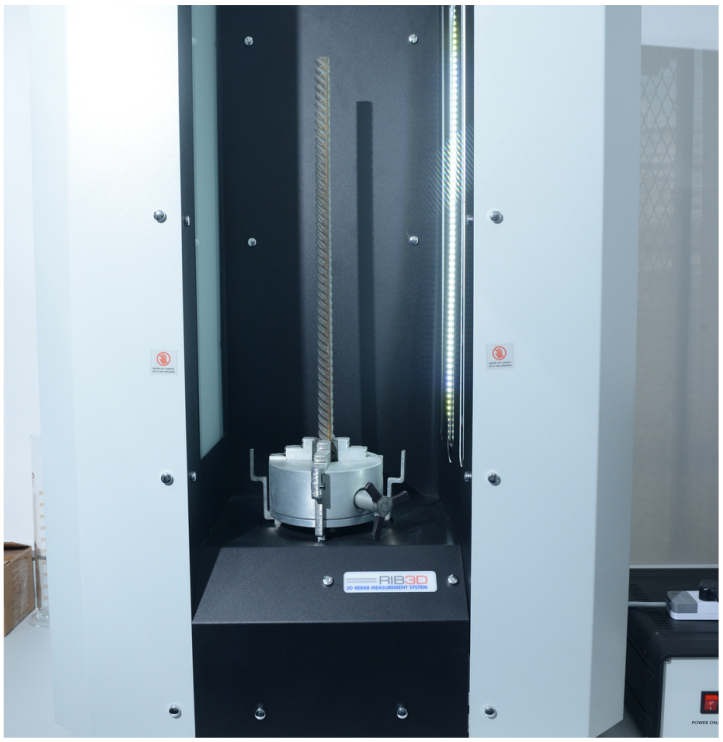
Scope and Testing Services

include but not limited to

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



Scope and Testing Services

include but not limited to

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

Scope and Testing Services

include but not limited to

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

Scope and Testing Services

include but not limited to

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

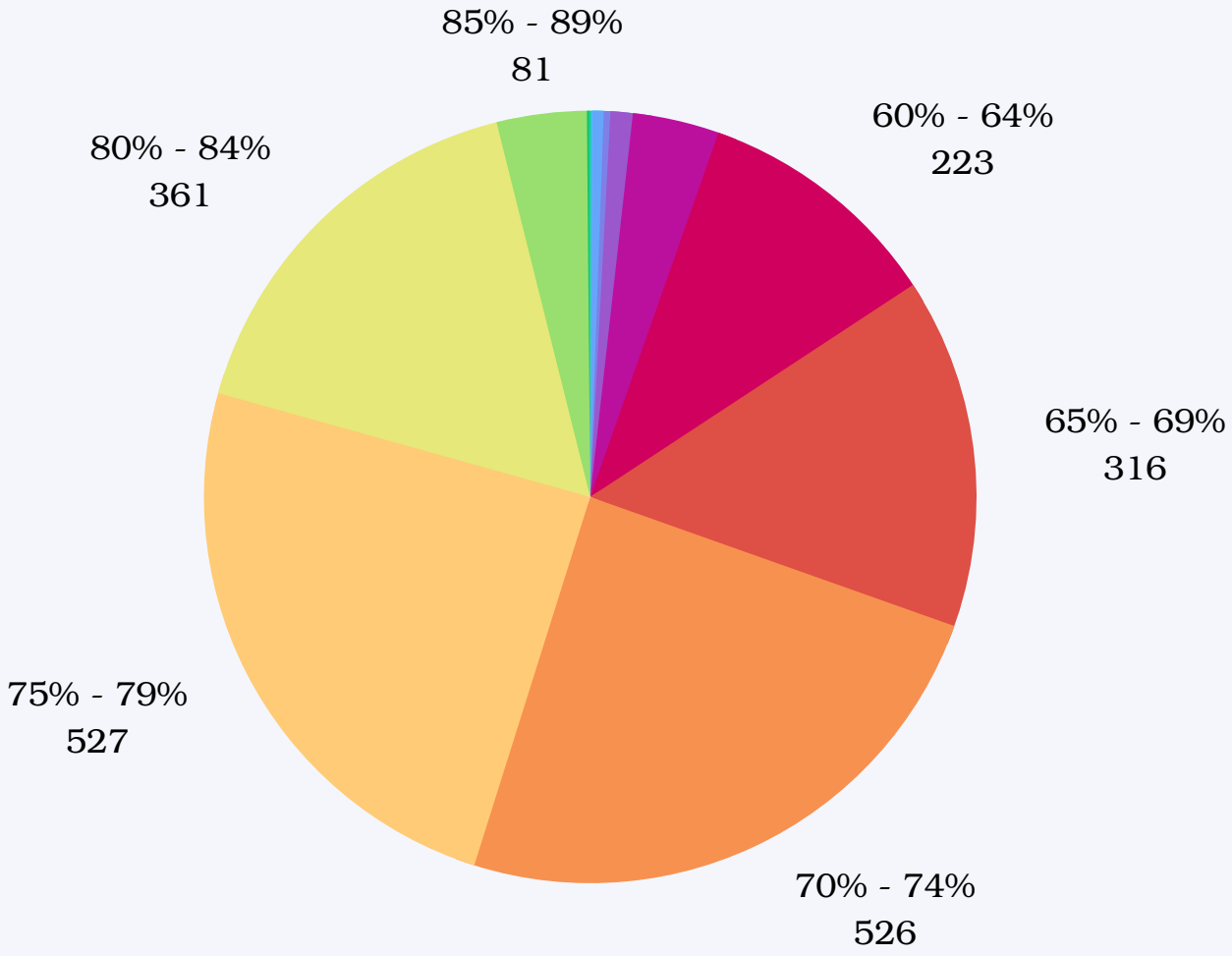
IRON & STEEL

- Tensile
- Yield strength
- Elongation
- Dimension

Get our complete list of testing facilities

QLASSIC
Quality Assessment System in Construction

Scan for QLASSIC brochure



QLASSIC Score Distribution (2016 - 2022)

Highest SHASSIC Achievement

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

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

Scan for SHASSIC brochure

CREAM would like to congratulate the following project team for the highest achievements for SHASSIC assessments for the July 2023. Congratulations!

July 2023

Project Name:

Proposed Development of Two Storey Warehouse in Phases Consist of: Parcel 1 (Parcel A1) 1) : 1 Unit 2 Storey Warehouse with Mezzanine Offices, 2) 3 Unit Guard House, 3) 2 Unit Refuse Chamber, 4) 1 Unit Lobby, 5) 1 Unit 2 Storey Common Facilities, 6) 1 Unit 11kv TNB Substation, 7) 1 Unit Consumer Switchgear Room, 8) 1 Unit Consumer Transformer Room, 9) 1 Unit Msb Room, 10) 1 Unit Genset, 11) 1 Unit MDF Room, 3 Unit Water Tank (Suction Tank, Sprinkler & Hydrant, Tank), 12) 1 Unit Pump Room (Fire Pump & Cold Water Pump), Parcel 2 (Parcel A2) : 1) Unit 2 Storey Warehouse with Mezzanine Offices, 2) 1 Unit Guard House, 3) 1 Unit Refuse Chamber. On Part of the Lot 109363, Persiaran Bukit Raja Kayangan/KU5

Developer:

Sime Darby Property (Industrial Asset 1)

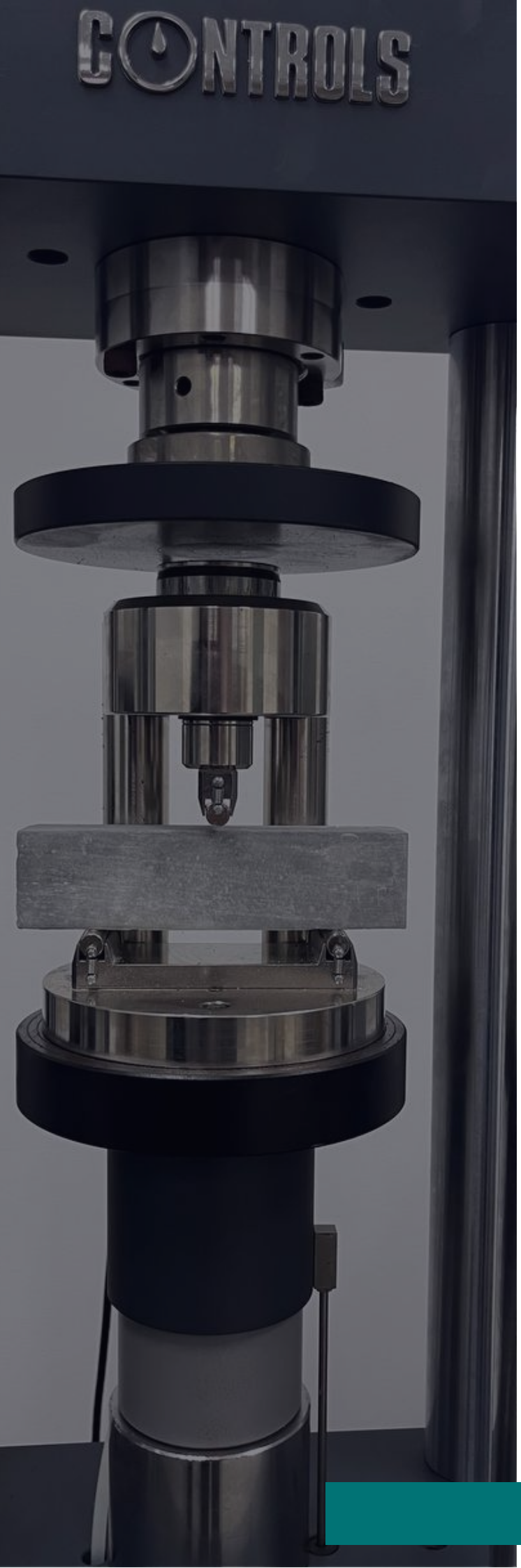
Contractor:

Orangebeam Construction Sdn. Bhd.

SHASSIC Score:

★★★★★

99.42%



highlights on July activities

First CREAM and YTL Cement Steering Committee

Date : 5th July 2023

Venue : CREAM, Sunway Putra Tower

A Steering Committee co-chaired by Dato' Sri Michael Yeoh, Managing Director of YTL Cement, and Sr. Mohd Zaid Zakaria, Deputy Chief Executive of CIDB (Construction Industry Development Board Malaysia), held its first meeting following the recent MOU signed between YTL Cement and CREAM to support the construction industry's transition to sustainable construction.

As part of the MOU, a collaboration governance structure was established as well as a working committee representing the three focus areas of the MOU, which are (1) Personnel development, (2) R&D, and (3) Sustainable construction. These workstreams will navigate paths towards achieving construction excellence and help transition the industry to sustainable construction.

1st R&D Working Committee Meeting between CREAM's Centre for Advanced Construction Technology and Innovation (CACTI) and YTL Cement's Construction Development Lab (CDL) Team

Date : 5th July 2023

Venue : YTL Cement's Construction Development Lab (CDL)

On July 5, 2023, the first committee meeting under the Research and Development (R&D) focus group was held in the YTL Cement Construction Development Lab (CDL) in Petaling Jaya with YTL and CACTI. The main discussion was about the R&D potential related to sustainable materials, advanced materials, the IBS system, and the R&D testing involved. The focus group also discusses the proposal for developing standards relating to the construction industry to make the sector easier to refer to. This focus group was co-chaired by Ir Soo Thong Phor, Technical Director (Product) of YTL, and Pn. Maria Zura Mohd Zain, Manager of CACTI.

Before the end of the session, the YTL CDL team, represented by Dr. Jegathish, visited the CACTI's team lab facilities and shared technical thoughts related to R&D activities by CDL, including advanced material usage. In conclusion, we hope this collaboration will be successful because both teams will work together with excellence for the betterment of the construction industry.

New Appearance of CIS 18 - Manual for IBS Content Scoring System (IBS Score)

Date : 7th-9th July 2023

Venue : Hotel Tenera, Bangi

CIS 18 Technical Committee Workshop on Jul 7-9, 2023 at Hotel Tenera, Bangi

The review of CIS 18 is nearing its final lap. On July 7-9, 2023, a development workshop involving a technical committee was held to finalise the document before progressing to public comment. The new version of CIS 18 considers enhancements of IBS factors by integrating current trends in aspects of emerging technologies, productivity, digital construction, environment and safety, and others. On July 25, 2023, the document went through final validation and voting before public comment.

The core improvement had resolved:

1. A clause for normative reference has been added.
2. Details and comprehensive terms and definitions have been added.
3. The IBS Factor for structural and wall systems has been revised.
4. Change the term used for the structural systems from material basis to construction method.
5. The term prefabricated has been used for construction methods using offsite manufacturing (e.g., precast concrete, metal, advanced building materials, etc.)
6. A formula for a building without wall systems has been added.
7. Additional factors for the in-situ construction method have been revised and improved.
8. Part 3: IBS Score for Other Simplified Construction Solutions has been improved and divided into three subcategories. Maximum point capping for each subcategory has been introduced. Adoption of technology from the Construction 4.0 Strategic Plan and other simplified methods for productivity improvement have been added.
9. IBS scoring guides have been improved. New illustration and calculation examples have been added.

10.IBS Score calculation examples have been changed for improvement.
11.Annex A (Modular Size for Standardised Components) has been added. A range of standardised components have been generated using coordinating sizes suitable for all construction methods.
12.All standardised components are no longer limited to preferred sizes only. By using coordinating sizes, all components are entitled to claim points.

This document outlines a streamlined and efficient evaluation methodology for assessing the implementation of IBS to transform the construction industry in a more productive, competitive, and progressive direction with the adoption of emerging technologies. Furthermore, this standard will serve as a guide in evaluating the IBS Score in a building project and conforming to the programme's related regulatory requirements.



CIS 18 Technical Committee final validation meeting on July 25, 2023 and voting.

CREAM -MKRM Laboratory Tour 2023

Date : 10 July 2023

Venue : Makmal Kerja Raya Malaysia,

It's a pleasure to have representatives from Keretapi Tanah Melayu Berhad (KTMB) to visit our CREAM-MKRM last 10th July 2023.

The main objective of the visit is to learn more about our testing facilities and services, and to discuss future collaboration opportunities. The visit was very productive and allowed the visitors to gather valuable information about the latest technology available at CREAM MKRM.

Thank you for joining us and making this visit a success. Our team at CREAM-MKRM is so glad to meet with you in our lab. We hope to cooperate with you soon as your business partner.

We are always open to visitors, so drop by and say hi! We would love to introduce our facilities and services to you.

KL BIM Day 2023

Date : 11th-13th July 2023

Venue : World Trade Center (WTC) Kuala Lumpur

CREAM is honoured to be invited by CIDB E-Construct to participate during KL BIM Day 2023. The KL BIM Day featured a 2-day conference where renowned speakers shared their experience and expertise in specific BIM topics and on implementing "BIM & Beyond" in their respective projects. The event also comes with a 3-Day BIM exhibition, where visitors can view and experience the latest and cutting-edge technology in BIM and other emerging technologies.

We were honoured to have the Minister of Works of Malaysia, Dato Sri Alexander Nanta Linggi, and Deputy Minister of Works, Dato' Sri Abdul Rahman Bin Haji Mohamad, together with Y.Bhg. Datuk Ir. Ahmad 'Asri bin Abdul Hamid, Chief Executive CIDB Malaysia, and Y.Brs. Sr. Mohd Zaid Zakaria, Deputy Chief Executive CIDB Malaysia, grace us with their presence at our booth.

SHEDA Property Expo 2023

Date : 14-16 July 2023

Venue : Borneo Convention Centre Kuching

CREAM-MKRM Sarawak is honoured to be invited by CIDB Negeri Sarawak to participate during the SHEDA Property Expo 2023. The annual SHEDA Property Expo, which is touted as the largest property expo in Sarawak, was organised by the Sarawak Housing and Real Estate Developers' Association (SHEDA) and held from July 14 to 16, 2023, at the Borneo Convention Centre Kuching (BCCK), Kuching, Sarawak. This expo aims to provide a platform and opportunities for developers and contractors to seek and capture sales leads from prospective purchasers. It also an exceptional platform for CREAM to introduce its services and engage with industry leaders and players.

The launching ceremony was graced by the guest of honour, YB Mr. Michael Tiang Ming Tee, Deputy Minister for Public Health, Housing, and Local Government, Sarawak. During the launching ceremony, the CIDB Negeri Sarawak booth, consisting of CREAM and ABM, was visited not only by the guest of honour but also by other notable guests.

This 3-day expo comprised a lot of informative and insightful talks from many industry leaders and government agencies. CREAM has been given the opportunity by CIDB Negeri Sarawak to shed light on the significance of QLASSIC and SHASSIC assessments in the construction industry. Both talks were presented by Siti Aishah, Test Engineer at CREAM-MKRM Sarawak.

Throughout the expo, CREAM-MKRM Sarawak actively engaged with other industries, including developers, contractors, and manufacturers such as Leviat Sdn Bhd, Knauf Sdn Bhd, Sarawak Economic Development Corporation (SEDC), Sarawak Metro, and many more.

SHEDA Property Expo 2023 was a resounding success. CREAM-MKRM Sarawak would like to express appreciation to CIDB Negeri Sarawak for the invitation to set up a booth during the SHEDA expo and for giving opportunities to CREAM-MKRM Sarawak to share information regarding QLASSIC and SHASSIC to raise awareness for the assessment conducted by CREAM.

Seminar Pematuhan Akta 520 (CIDB) Bersama Pihak Berkuasa Tempatan
Date : 18 July 2023
Venue : Promenade Hotel in Kota Kinabalu

CIDB Sabah organised an Industrial Talk titled 'Seminar Pematuhan Akta 520 (CIDB) Bersama Pihak Berkuasa Tempatan' on July 18, 2023, held at the Promenade Hotel in Kota Kinabalu. This event was part of CIDB's initiative to enhance awareness among industry players regarding the acts and regulations that need to be followed by the construction industry. The main objective is to comprehend construction laws in accordance with CIDB Act 520 requirements. The Industrial Talk received an encouraging response from the local industry, with about 150 participants taking part in the event.

CREAM was invited by CIDB Sabah to participate in the Industrial Talk as a speaker and to set up an exhibition booth to promote CREAM and MKRM Sabah services to the local industry players. Mrs. Azila represented CREAM, delivered her talk, and shared a comprehensive presentation on CREAM and all its services that benefit the industry.

The event started with the opening ceremony by CIDB Negeri Sabah Director, Mr. Rosmen Ag. Hassan. It was followed by five sharing sessions on "Pematuhan Industri Pembinaan (Akta 520)" and "Pendaftaran Kontraktor & Levi". The third session covers" Pendaftaran, Akreditasi, Pemerakuan, and Latihan Personel Binaan" while the fourth session was on "Standard dan Kod Amalan Dalam Industri Pembinaan Sektor Pembangunan Teknologi ". The fifth and final topic was presented by CREAM with the topic "Servis & Senarai Pengujian CREAM MKRM Sabah".

CREAM would like to convey its appreciation to CIDB Negeri Sabah for inviting us and giving the opportunity to participate in the event. CREAM is looking forward to more engagement sessions with the industry players in Sabah and with CIDB to promote the safe usage of certified and tested construction products and materials that meet CIDB regulations and requirements.

Visit from China Academy Building Research (CABR) led by President Xu Jiefeng

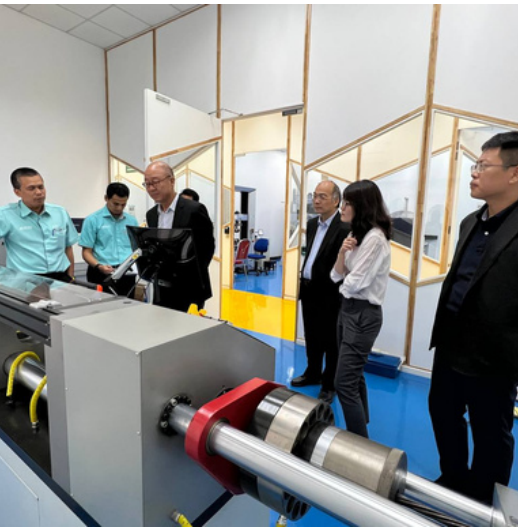
Date : 24 July 2023

Venue : Makmal Kerja Raya Malaysia (MKRM)

CREAM is delighted to welcome delegates from the China Academy of Building Research (CABR) to our laboratory, Makmal Kerja Raya Malaysia. We are truly honoured to receive a visit from the delegation, led by President Xu Jiefeng.

Founded in 1953, the China Academy of Building Research (CABR) is the largest and most diverse research institution in the building industry in China. CABR has 14 research institutes (centres) and 77 laboratories.

This was a huge opportunity for us to see how established CABR is, and we are excited to work with them in the future!



Kursus Pembinaan Berdaya Tahan

Date : 24 & 25 July 2023

Venue : Auditorium Galeri Paya Bakau MPSPK, Sungai Petani Kedah Darul Aman

On July 24 and 25, 2023, the 2023 Kursus Pembinaan Berdaya Tahan took place at the MPSPK Mangrove Swamp Gallery Auditorium, Sungai Petani Kedah Darul Aman. This two-day course aims to provide exposure and train the industry and PBT to use the guidelines developed by CREAM for assessing the risk of landslides and floods in an area before development takes place.

On the first day, the presentation included the title Flood Risk Assessment and Flood Vulnerability Index for Critical Infrastructure in Malaysia, delivered by the Blessed Datuk Ir. Hj Abdullah Isnin (Former Director General, Malaysian Irrigation and Drainage Department) and Mr. Noor Hisham Ab. Gani (NAHRIM Research Officer). Participants were then taken to visit the Sabo Dam Site and the location where the debris flow occurred (2021) in Titi Hayun, Yan, Kedah, as well as The briefing was delivered by the State JMG Director of Kedah/Perlis/Pulau Pinang, Tuan Haji Azizan Ali.

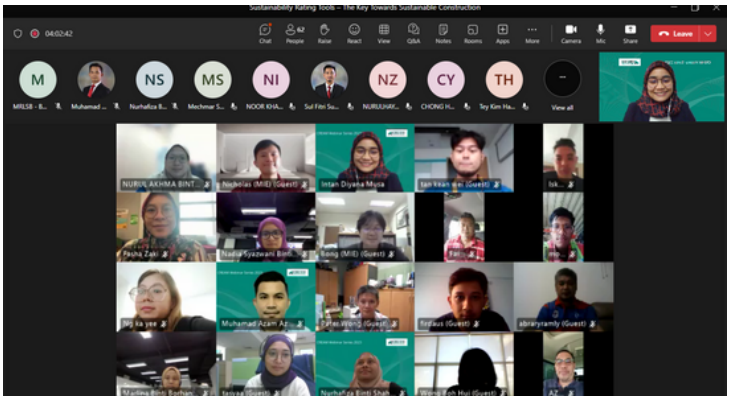
The course continued on the second day with discussion and sharing on Guidelines for Landslide Vulnerability Assessment and the Development of a Risk Index for Critical Infrastructure in Malaysia. The guest speakers consisted of His Grace Dato' Paduka Ir. Dr. Che Hassandi Abdullah (Former Senior Director, CREate JKR) and Yang Berbahagia Dato' Zakaria Mohamad, P.Geol (Chairman of Geomapping Technology Sdn Bhd and Board of Geologists).

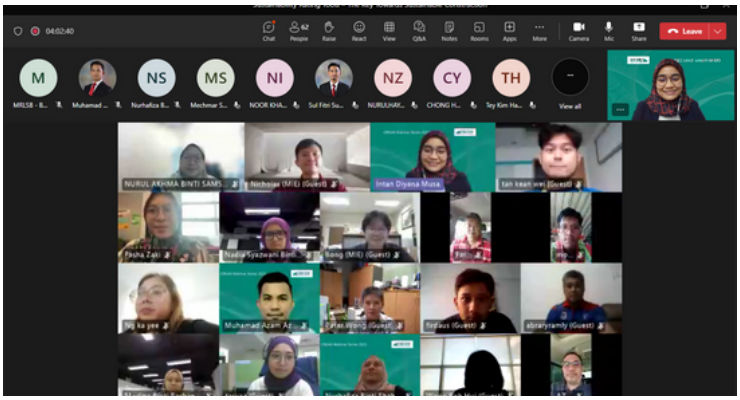
The 2023 Resilient Construction Course will continue to be organised in the southern zone on the July 6 and 7, 2023, at the Universiti Teknologi Malaysia (UTM), Johor Bahru.

For more information, please contact Sr. Yusrin at yusrin@cream.my or 03-2779 1479.

CREAM Webinar Series 2023

CREAM Webinar Series 2023 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.





Session 1: Contractor's Quality Management System (CQMS) - An alternate to Quality Management System Specially Designed for Contractors and Recognised by CIDB

27 July 2023

Speakers:

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

No of participants: 130 pax

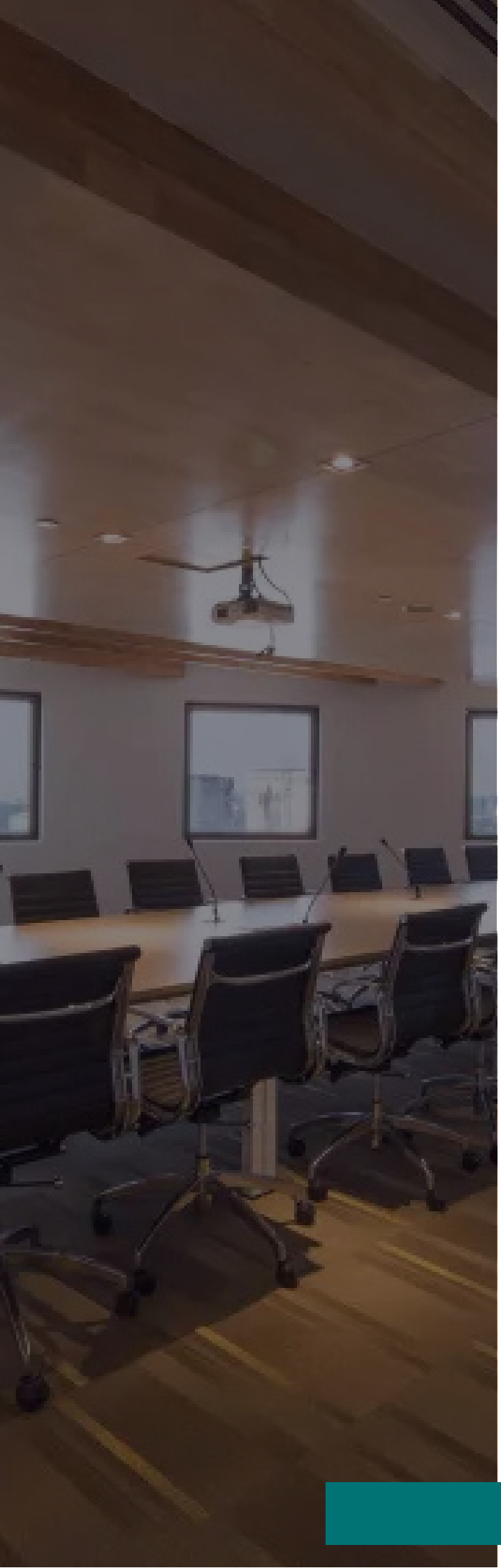
Session 2: Sustainability Rating Tools - The Key Towards Sustainable Construction

31 July 2023

Speakers:

- Mr. Azam Azmai
  Assessment Officer, Construction Research Institute of Malaysia (CREAM)
- Dr. Puteri Shireen Jahn Kassim
  Sustainability Director, EAC Consulting Sdn Bhd
- Ms. Nurhafiza Shahabudin
  General Manager Risk & Compliance, Malaysia Rail Link Sdn Bhd

No of participants: 65 pax



upcoming events


CREAM WEBINAR SERIES 2023
Environmental, Social and Governance (ESG) for the Construction Industry
in collaboration with
CREAM
CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA
YTL CEMENT
10 CCD POINTS PER SESSION
Session 1: ESG – What It Is and Why Is It Important for Construction Industry?
22 August | 9am - 12pm
Session 2: Building Better Sustainably with ESG in the Construction Industry
24 August | 9am - 12pm
REGISTER NOW
FEES:
(per session)
RM75
(PER PAX)
Student:
RM30
(PER PAX)
GROUP REGISTRATION:
(MIN 3 PEOPLE PER GROUP)
RM50
(PER PAX)
Student:
RM20
(PER PAX)
For more info:
www.cream.my
+603 2779 1479
creamcidb
cream_cidb
marketing@cream.my
Construction Research Institute of Malaysia

KURSUS PEMBINAAN BERDAYA TAHAN 2023

CIDB MALAYSIA | CREAM CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA

25 MATA CCD (2 KURSUS)
10 MATA CPD (1 KURSUS)

Tarikh: 6 & 7 September 2023
Tempat: UTM Johor Bahru

OBJEKTIF

Untuk memberi pendedahan dan melatih pihak industri dan PBT bagi penggunaan garis panduan yang telah dibangunkan oleh CREAM bagi penilaian risiko bencana tanah runtuh dan banjir di sesuatu kawasan sebelum pembangunan diadakan.

Kursus Pembinaan Berdaya Tahan - Guidelines for Landslide Vulnerability Assessment & Development of Risk Index for Critical Infrastructure in Malaysia + Lawatan Tapak ke Gunung Pulai, Pontian*

Rabu, 6 September 2023

**Pihak CREAM tidak menyediakan pengangkutan bagi lawatan ke tapak, peserta perlu menggunakan kenderaan masing-masing*

Kursus Pembinaan Berdaya Tahan - Flood Risk Assessment & Flood Vulnerability Index for Critical Infrastructure in Malaysia

Khamis, 7 September 2023

Sasaran Peserta:

- ✓ Pihak berkuasa tempatan (PBT)
- ✓ Pemaju
- ✓ Kontraktor
- ✓ Perunding

PAKEJ YURAN PENYERTAAN

1 Kursus
RM200/pax

2 Kursus
RM350/pax

Peserta Berkumpulan Min 3 orang
RM150/pax/kursus

Guidelines for Landslide Vulnerability Assessment & Development of Risk Index for Critical Infrastructure in Malaysia telah diluluskan oleh Majlis Negara Kerajaan Tempatan (MNKT) ke-79 2022 untuk digunapakai di peringkat Pihak Berkuasa Tempatan

DAFTAR SEKARANG

Maklumat Lanjut:

www.cream.my | +603 2779 1479 | creamcidb | cream_cidb

yusrin@cream.my | Construction Research Institute of Malaysia

Penceramah:

Datuk Ir. Hj. Abdullah Isnin
Mantan Ketua Pengarah,
Jabatan Pengairan dan Saliran Malaysia

Dato' Paduka Ir. Dr. Che Hassandi Abdullah
Mantan Pengarah Kanan,
CREaTE JKR

Dato' Zakaria Mohamad, P.Geol
Pengerusi,
Geomapping Technology Sdn. Bhd. dan
Board of Geologist

Ir. Hjh. Bibi Zarina Che Omar
Pengarah Teknikal,
Dr. Nik & Associates Sdn Bhd

Dr. Nor Eliza Alias
Pensyarah Kanan, Fakulti Kejuruteraan Awam,
Universiti Teknologi Malaysia (UTM)

Ts. Dr. Mastura Azmi
Pensyarah Kanan, Pusat Pengajian Kejuruteraan Awam,
Universiti Sains Malaysia (USM)

**Para penceramah adalah terdiri daripada Ahli Jawatankuasa Teknikal bagi Pembangunan Garis Panduan Tanah Runtuh & Banjir serta mempunyai pengalaman yang luas di dalam bidang masing-masing*

Che Omar

hosted by: CIDB MALAYSIA | organised by: CREAM CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA | co-organised by: MBOT LEMBAGA TEKNOLOGIS MALAYSIA | supported by: UTM UNIVERSITI TEKNOLOGI MALAYSIA

DIG.IT.ALL Forum Series

EMBRACING DIGITAL TECHNOLOGY

CCD & CPD POINTS APPLIED

Day 1: Industrial Forum

6 September 2023, Wednesday | 8AM – 5PM | Pulai Springs Resort, Johor Bahru

Session 1

Achieving Sustainable Construction through Digitalisation

SPEAKER 1:
Ar Ahmad Farik Abdul Ghaffar
Principal, Farik Ghaffar Architect

SPEAKER 2:
Ts Lim Hui Yan
Executive Director, Gamuda Engineering

SPEAKER 3:
Pn Maimunah Jaafar
Director, Lead Technology & Innovation, Iskandar Regional Development Authority (IRDA)

MODERATOR:
Dr. Zafira Nadia Maaz
Senior Lecturer,
Universiti Teknologi Malaysia

Session 2

Machine Learning and Human Machine Collaboration in Construction Industry

SPEAKER 1:
Ts. Dr. Eeydzah Aminudin
Senior Lecturer,
Universiti Teknologi Malaysia

SPEAKER 2:
Dr. Mohd Nazri Bajuri
ASEAN Regional Director, Kagool

SPEAKER 3:
Mr. Jakub Wachocki
Director of Digital Co-Ventures & Strategic Partnerships, Bentley Systems

MODERATOR:
Dr. Afnizanfaizal Abdullah
General Manager (Tech Commercialization), MRANTI

Day 2: Technical Visit

7 September 2023, Thursday | 8AM – 12PM | Johor Bahru, Johor

FEES:

**All payments must be made to CREAM. The secretariat will contact you via email and send an invoice for payment purposes*

NORMAL RATE: RM200 (PER PAX)

STUDENT RATE: RM100 (PER PAX)

GROUP REGISTRATION: *(MIN 3 PAX PER GROUP)*
GOVERNMENT OFFICIALS & MBOT MEMBERS: RM150 (PER PAX)

+

TECHNICAL VISIT:
RM50 (PER PAX)
(limited to 20 pax only - first come, first served basis)

**Participation of the technical visit is prerequisite of the industrial forum

Register here
*Walk-in registration is accepted

https://lnkd.in/gb8mcsSv

For more info: www.cream.my/dig-it-all
shahir@cream.my
+603 2779 2479

hosted by: CIDB MALAYSIA | organised by: CREAM CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA | co-organised by: MBOT LEMBAGA TEKNOLOGIS MALAYSIA | supported by: UTM UNIVERSITI TEKNOLOGI MALAYSIA

DIG.IT.ALL Forum Series

EMBRACING DIGITAL TECHNOLOGY

Day 1: Industrial Forum

6 September 2023, Wednesday | 8AM – 5PM | Pulai Springs Resort, Johor Bahru

Programme	Time
Registration	8.00 am – 9.10 am
Welcoming remarks by CIDB	9.10 am – 9.20 am
Opening Speech by Dr. Md Fauzi bin Md Ismail, MBOT Registrar	9.20 am – 9.30 am
Special Slot by Ts. Abdul Hafiz bin Mohamad Nor, MBOT Deputy Registrar (Operation)	9.30 am – 10.00 am
Refreshment and Networking	10.00 am – 10.30 am
Session 1: Achieving Sustainable Construction through Digitalisation	10.30 am – 12.30 pm
Q&A Session	12.30pm – 1.00pm
Lunch and Networking	1.00 pm – 2.15 pm
Session 2: Machine Learning and Human Machine Collaboration in Construction Industry	2.15 pm – 3.45 pm
Q&A Session	3.45 pm – 4.15 pm
Refreshment & End of Programme	4.15pm - 5.00 pm

hosted by: CIDB MALAYSIA | organised by: CREAM CONSTRUCTION RESEARCH INSTITUTE OF MALAYSIA | co-organised by: MBOT LEMBAGA TEKNOLOGIS MALAYSIA | supported by: UTM UNIVERSITI TEKNOLOGI MALAYSIA

DIG.IT.ALL Forum Series

EMBRACING DIGITAL TECHNOLOGY

Day 2: Technical Visit

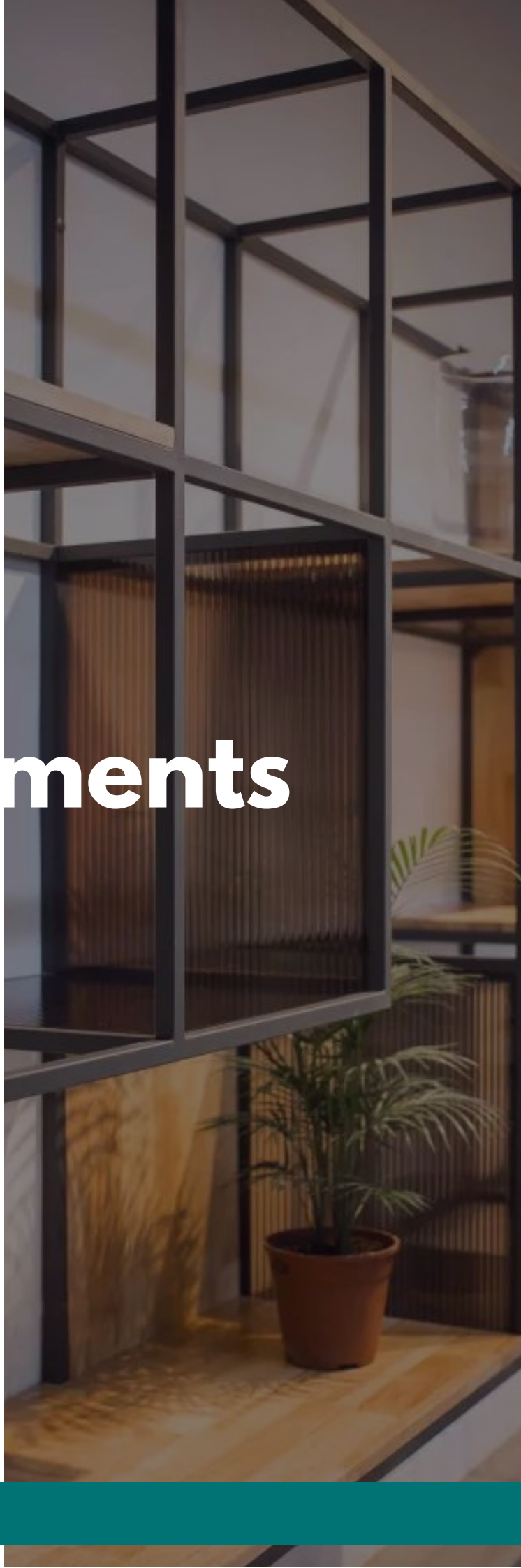
7 September 2023, Thursday | 8AM – 12PM | Johor Bahru, Johor

Programme	Time
Registration	8.00 am – 9.00 am
Briefing/Prep Talk by Site Owner	9.00 am – 9.15 am
Technical Visit	9.15 am – 10:45 am
Session Wrap Up & Q&A Session	10:45 am – 11:15 am
Brunch	11.15 am – 12:00 pm
End of Programme	12 pm

Learn more:

www.cream.my +603 2779 1479
shahir@cream.my
creamcidb cream_cidb
Construction Research Institute of Malaysia

advertisements



SMART WEB PORTAL
CALL FOR ARTICLES

The Standard, Method, Assessment, R&D and Technology (SMART) web portal aims to serve as a one-stop center for the Malaysian Construction Industry Development Board (CIDB) to disseminate information and the most recent updates about the construction industry, including products, services, and facilities.

Accepted articles will be published in the SMART web portal
https://smart.cidb.gov.my/

Submission Period **16 May 2023 - 31 Sept 2023**

TOPICS

- ✓ **Civil Engineering and Built Environment**
- ✓ **Digitalisation in Construction**
- ✓ **Construction and Innovation Technology**
- ✓ **Social and Economic Impacts in Construction**
- ✓ **Sustainable and Resilient in Construction**
- ✓ **Smart Cities**
- ✓ **ESG in Malaysia's Civil Society**

**Other topic areas will be considered and accepted upon reviewer approval*

Info & Submission

www.cream.my/smart_webportal

TERMS AND CONDITIONS

Authors & Honorarium

- Maximum 3 authors per article
- Each author will be given honorarium and will be paid once articles were published in the portal
- CREAM will notify the authors if their articles are accepted for publication

Rights

- Reviewer panel from CIDB have the final decision on the article
- Articles published are belonged to CIDB
- CIDB will have the rights to use any information in the articles for future references

For more info: 03 2779 1479 Level 29, Sunway Putra Tower smart@cream.my

Advertise Your Products & Services Here

With CREAM E-Magazine, you will be connected to a larger community of the construction stakeholders

Advertisement Package	
Quarter Page	RM 300
Half Page	RM 500
Full Page	RM 750

Contact Us

03 2779 1479
marketing@cream.my
www..cream.my

PUBLISH YOUR ARTICLES IN CREAM E-MAGAZINE

CREAM is always looking for the best and brightest to share their expertise with our readers. We are offering a space for students and academician to submit your construction-related articles and get them published in our e magazine! This is a great opportunity to showcase your work as well as learn from experts in the field of construction.

Requirements

- Students and academician only
- Construction field related
- Max 3 pages

Submission Fee

RM500/article

Submit Now

Send your articles to :
marketing@cream.my

Connect with us

+603 2779 1479

general@cream.my

cream_cidb

creamcidb

Construction Research Institute of Malaysia