

CREAM

e-magazine



- The Interlocking Hollow Block System - A Modern Earth Building
- MOSA-CIDB MOMENTALK CIS 22 (Vol. 1)
- CREAM Towards MS ISO/IEC 17020:2012 Inspection Body Accreditation
- Testing Facilities Available at CREAM-MKRM

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about us

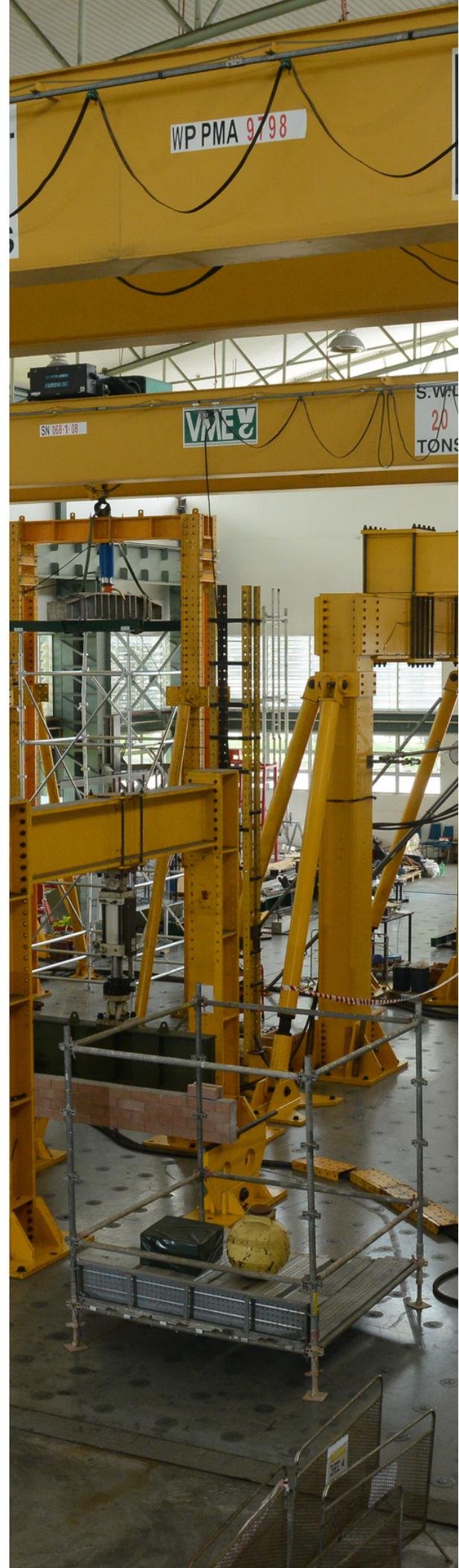
Construction Research Institute of Malaysia (CREAM) was established on 26 March 2004 as a Company Limited by Guarantee (SBMJ) under the Act Company 1965. CREAM became fully operational on January 1, 2006. Establishment CREAM is to be the research arm of the Industrial Development Board Construction (CIDB) 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 - QCLASSIC, SHASSIC, MyCREST and Sustainable Infrastar
- Certificate of Approval
- Inspection and Sampling
- Forensic Investigation
- Technical Opinion
- Journal Publication



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The Interlocking Hollow Block System - A Modern Earth Building



by Syed Hamad Naguib Syed Azmi and Maria Zura Mohd Zain

Earth as a construction media has been utilized since thousands of years ago and is still relevant. Ancient civilisations used them to construct the buildings exist around us today. In fact, one example of ancient civilisations used was in building a structure known as the pyramids. It was applied in several ways, but the most common was in building houses and temples, as shown in Figure 1. The Egyptians built them with earth and stone. Fast forward to today, earth construction has evolved quality wise in terms of strength and durability. This has been accomplished through various modified techniques to improve a soil's physical and mechanical properties for a specific application. Altering the texture and elasticity of the soil, for example, by adding or subtracting sand, clay, etc., which also include compacting the soil can increase its resistance to loading. There are also inorganic binders added, for example, cement, to enhance the soil's strength and durability, or make it otherwise, so that the unsuitable soil can easily be useable.



Figure 1: Al Minya, Egypt

(Source: World Religious Photo Library / Alamy)

Therefore, the Construction Research Institute of Malaysia (CREAM), together with Universiti Teknologi Malaysia (UTM), has developed a stabilised compressed earth block called The Interlocking Hollow Block System (IHBS). The IHBS was introduced to replace traditional masonry construction methods and is also a component of the Industrialised Building System (IBS).

The main composition of IHBS are laterite clay soil, sand, cement, and water. The IHBS is produced through pressing method, where the proposed block mixture is pressed with a compression machine. It promotes the concept of green building construction, which eliminates the burning process of brick and requires no formwork. As a result, it can improve the construction of a much-needed house at a fraction of the cost and in a much shorter time as its interlocking lego-like system, is visibly neat and produces less waste.

The IHBS is designed to become a load-bearing block that promotes the concept of construction where no reinforced concrete columns and beams are needed. Therefore, the construction period can be lessened compared to the conventional reinforced concrete construction method. Besides being a load-bearing block, IHBS also does not need to be plastered, and the brickwork's natural aesthetic features enhance the building's beauty, as illustrated in Figure 2.



Figure 2: IHBS sample house, Chan Sow Lin

(Source: CREAM)

Therefore, not only it reduced the construction time, decreased cost and reduced material usage but also guarantees the quality of the building, for example, in acoustic, heat performance and durability. The IHBS properties was tested on compression, tensile, bending, water absorption, shear, and durability. It is hoped that the findings from these research works could increase the confidence in using IHBS for multistory buildings, for low-to-medium cost housing and public amenities building such as schools, especially in an urban area where the cost of land is prohibitive.



Figure 3: Hose stream test
(Source: CREAM)

The durability of IHBS is demonstrated by the fact that some earth-compressed buildings still lasts for years. The hose stream test has also assessed IHBS. Figure 3 displays the hose stream test, which is a practice required to the installation of building elements to simulate an impact similar to a hose stream's impact, erosion, and cooling effects as part of a fire-test-response standard. Building elements include, but are not limited to, wall and partition assemblies, fire-resistive joint systems, and doors. Immediately after the Fire Resistance Test, the assembly frame was moved into position for the Hose Stream Test. The exposed surface of the test assembly was a determined impact, erosion and cooling effects of a hose stream described in the ASTM Standard E2226-15b: Standard Practice for Application of Hose Stream. The testing was conducted to investigate whether the IHBS maintained its integrity without any cracks or damage.

The cost-efficiency aspect of using IHBS is a critical aspect that needs to be addressed. The main factors affecting the use of IHBS can be concluded as the need for know-how on the installation, the need for quality brick with the perfect size, the need for the concept of design and the need to understand the strength and performance of the IHBS. Before using IHBS for housing construction, all these factors must be focused on first. However, our study also revealed several non-value-added steps like spreading base mortar for various courses, vertical mortar jointing and levelling. The IHBS was manufactured using the pressed method, in which the proposed block mixture was pressed with a compression machine. Various forms of waste, such as overproduction, unnecessary movement, unnecessary processing, inventories and waiting, seen to be associated with conventional blocks, are minimised to a large extent with the interlocking block in use. The elimination of various non-value-added steps related to conventional block wall construction can also be identified using the interlocking block system by reducing the cycle time of block bonding, thus increasing the speed of wall construction.

There is also a significant reduction in the material required for the interlocking block wall construction process due to the absence of mortar jointing. Reduction in the labour and material required in the interlocking block wall construction process makes the cost associated with building walls using the interlocking blocks is far less. As a result, using IHBS can reduce construction costs by up to 26.6% and construction time by up to 50% compared with the conventional construction of the typical reinforced concrete structure.



Using soil for IHBS cannot be considered a zero-carbon emission. However, the process of making IHBS is very different from conventional masonry process. While the conventional masonry process generally requires burning, IHBS does not. Therefore, if we assume that the building produced by soil located in the vicinity, there is no pollution associated with its transportation. This production process difference implies a significant reduction in the emissions of greenhouse gases (GHG) for IHBS.



In conclusion, the use of IHBS, compared to the conventional construction method, has significant advantages in cost savings, less reliance on labour, quality control, environmentally friendly and less dependent on weather problems. However, the success of achieving these advantages can become a reality if all construction players fully understand their roles and collaborate in the process of transforming our construction industry.

MOSA-CIDB MOMENTALK CIS 22 (Vol. 1)



by *Syaza Nabilla Mohd
Suhaimi*



Malaysian Occupational Scaffolding Association (MOSA) in collaboration with Construction Industry Development Board (CIDB) has organized MOMENTALK CIS 22 (Volume 1) on the 9th of February 2023. The event was held at DoubleTree by Hilton, Putrajaya.

The event focused on providing information on current and amended the Construction Industry Standard (CIS 22) for industry players and provided technical comprehension on the said Standard. MOMENTALK CIS 22 (Vol. 1) was officiated by YBrs. Mr Mohd Anuar Embi, the Head of Director, Department of Safety and Health (DOSH) with the presence of Sr. Mohd Zaid Zakaria, the Deputy Chief Executive II CIDB.

CIS 22 main target is to complement the scaffolding product compliance requirement regulated by CIDB Malaysia (Amendment of Fourth Schedule). This document was first being published in 2017 and executed by CIDB since then. It has become the Standard on safe use of scaffolding in construction. CIDB maintained the relevance of CIS 22 to be continuously implemented in the industry by reviewing and revising the content and hence, Second Edition was published in 2021. An updated and more comprehensive Third Edition is planned to be published within 2023. The review process involves a Technical Committee comprises the authority, scaffolding industry experts and practitioners.

This particular document is no stranger to CREAM as our team is assigned by CIDB to carry out Inspection and Sampling in reference to CIS 22 for the benefit of scaffolding manufacturers, importer, contractors, product owners and other relevant parties.



Each of the session highlighted the importance of the current Standard and ways to comply according to the Perakuan Pematuhan Standard (PPS). Sessions are split to four different topics according to the speaker's expertise and background. The session began with Dato' Dr Saravanan, President of MOSA, whose speech emphasised on the necessity of scaffolding companies to be endorsed by CIDB. The following session by Ts. Nor Hamiza, CIDB Senior Manager, elaborated on the content of CIS 22 hence enhances participants' comprehension on the requirement of the Standard. Mr Muhammad Anis Fadhli, Technical Expert in MKRS Group highlighted the technical aspects of scaffolding that is commonly used in Malaysia. While Tn Razali Haizir, Senior Assistant Director of Customs II highlighted the importance of compliance to Standards in order to meet the requirement of importation.

The event was a great success with a total of 200 participants and CREAM is proud to be one of the main sponsors. CREAM has made a full use of the opportunity to set up a booth at the event which was visited by majority of the attending participants. Not only did we manage to promote our services, we also gather more contacts with the people within the industry. The discussions and insights shared were truly informative. It was indeed a privilege to be a part of such a dynamic community. CREAM is grateful for the opportunity to showcase our services as well as contribute to the event.



**Read CIS 22:2021
for more info**



CREAM Towards MS ISO/IEC 17020:2012 Inspection Body Accreditation



by *Muhammed Asraff bin Abdul Rahman*

MS ISO/IEC 17020 is a standard that specifies the requirements for the competence and impartiality of bodies performing inspection activities. Our aim is to be recognised and accepted locally and internationally for our competence and impartiality in conducting inspections. It will boost our client's productivity by providing product inspection services prior to their product be tested, certified and approved by regulatory bodies such as Construction Industry Development of Board Malaysia (CIDB), and other local authorities.

The benefits of using CREAM as an accredited inspection body for clients include:

- Confidence in the results: CREAM shall follow strict standards and procedures in conducting inspections, ensuring that the results are accurate, reliable, and impartial. Clients are assured that the inspection findings are unbiased and reflect the true condition of the inspected item or system.

- Compliance with regulations: Many industries and jurisdictions require inspections to be carried out by accredited bodies to meet regulatory requirements. By using CREAM as an accredited inspection body, our clients can be assured that these inspections will comply with the specified relevant regulations or standards.
- Enhanced credibility: When our clients use CREAM as an accredited inspection body, they can reassure their stakeholders, customers, and partners that they take quality and safety seriously. This can enhance their reputation and credibility in the marketplace.



HIGHLIGHTS

- Cost savings: CREAM’s high level of expertise and efficiency in conducting inspections, can result in cost savings for clients. By identifying and addressing potential issues earlier on, clients can avoid costly delays, downtime, and repairs.
- Access to expertise: CREAM employs highly trained and experienced inspectors who can provide valuable insights and recommendations to clients. Clients can benefit from the expertise and knowledge of these professionals in identifying and addressing potential issues.

Overall, using an accredited inspection body can provide clients with greater confidence, compliance, credibility, cost savings, and access to expertise in their inspection processes. This is our main priority in implementing MS ISO/IEC 17020: 2012 accreditation as an inspection body to the next level!

Some backgrounds of our inspection service so far:

- Started from 2013 until now.
- More than 400 construction related products were inspected.
- More than 100 inspection locations covered (locally and abroad).
- More than 21,000 man-hours spent throughout our operations.



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 machine 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



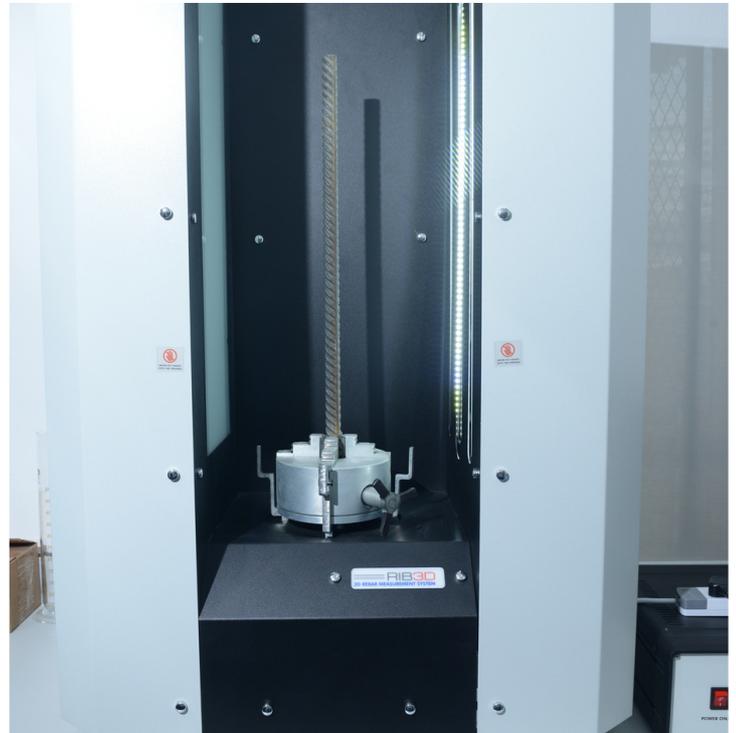
Scope and Testing Services

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

AGGREGATE

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

CEMENT

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

IRON & STEEL

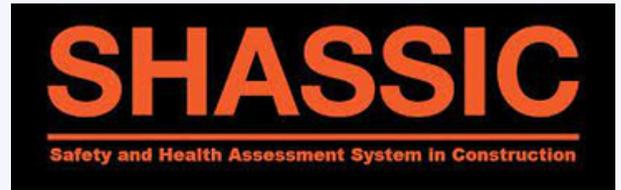
- Tensile
- Yield strength
- Elongation
- Dimension



Get our complete list of
testing facilities

SHASSIC Scores

The Statistics



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

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



Scan for SHASSIC brochure

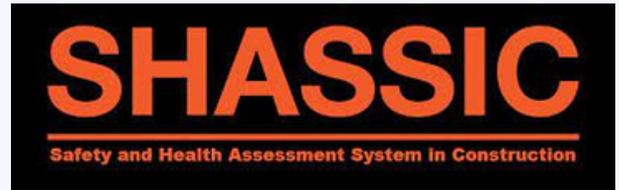


No projects assessed in 2021 by states

 31	 1	 1	 0
 12	 1	 0	 0
 10	 1	 0	 0
 4	 1	 0	 0

SHASSIC Scores

The Statistics



SHASSIC is developed with the objectives to, (i) benchmark the level of safety and health performance of the construction industry in Malaysia, (ii) have a standard system for safety and health assessment in the construction industry, (iii) assess safety and health performance of contractor(s) based on this standard, (iv) evaluate the performance of contractor(s) on the safety and health practices at site, (v) improve and to take necessary corrective action on OSH performance and management at site, and (vi) compile data for statistical analysis.

SHASSIC is beneficial towards Continuous Improvement and increases the readiness for OSH in Construction Industry – (Management) (OSHCIM). The applicants will also receive several benefits or incentives including automatic 20 CCD Points for contractor’s registration renewal, extra points for OHSAS 18001 / MS1722 / ISO45001 Certification, and competency to participate in MCIEA for Safety Category.

No projects assessed in 2022 by states

 50	 3	 1	 0
Selangor	Sarawak	Melaka	Sabah
 22	 3	 1	 0
Johor	Putrajaya	Perak	Perlis
 17	 2	 1	 0
Kuala Lumpur	Kedah	Terengganu	Pulau Pinang
 3	 2	 1	 0
Negeri Sembilan	Pahang	Kelantan	Labuan

For more info and enquiries, contact us at casc@cream.my

QLASSIC Assessments

The Statistics

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

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



Scan for QLASSIC brochure

No projects assessed in 2021 by states

 Selangor	76	 Kedah	17	 Sabah	8	 Kelantan	3
 Johor	38	 Melaka	15	 Sarawak	5	 Pahang	1
 Kuala Lumpur	33	 Negeri Sembilan	14	 Terengganu	4	 Perlis	0
 Pulau Pinang	24	 Perak	12	 Putrajaya	3	 Labuan	0

QLASSIC Assessments

The Statistics

The system is created to achieve five objectives explicitly to, (i) benchmark the quality of workmanship of the construction industry, (ii) establish a standard quality assessment system on the quality of workmanship of construction work, (iii) assess the quality of workmanship of a construction project based on the relevant approved standard, (iv) used as a criterion to evaluate the performance of contractors based on the quality of workmanship, and (v) compile data for statistical analysis.

QLASSIC provides the industry players the ability to compare the level of craftsmanship in their construction projects, offers them a uniform system for evaluating the quality of workmanship in construction projects, enhances the quality control of construction projects and is chosen as a standard for contractors' performance scorecards. QLASSIC applicants will also enjoy two benefits including automatic 20 CCD points for contractor's registration renewal and are eligible to be awarded during QLASSIC Day.

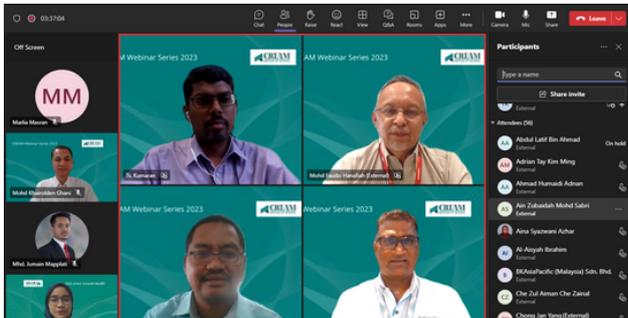
No projects assessed in 2022 by states

 Selangor	75	 Melaka	16	 Pahang	6	 Terengganu	2
 Johor	50	 Negeri Sembilan	14	 Sabah	6	 Kelantan	1
 Kuala Lumpur	27	 Perak	13	 Sarawak	4	 Putrajaya	0
 Kedah	18	 Pulau Pinang	12	 Perlis	3	 Labuan	0

For more info and enquiries, contact us at casc@cream.my

CREAM Webinar Series 2023

Safety and Quality Practices in Construction Industry



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

22 February 2023

Speakers:

- Tuan Haji Mohd Faudzi Hanafiah
General Manager, Sunway Construction Group Berhad
- Ts. Thiagu Arasan
Senior Manager, Quality Department, Paramount Property Development Sdn Bhd
- Ts. Kumaran
General Manager, Bina Initiatives Sdn Bhd

No of participants: 133

Session 2: Strengthening and Promoting Safety and Health in Construction

23 February 2023

Speakers:

- Mr. Yussaydi Md Eusoff,
SHASSIC Assessor
- Mr. Mohd Nizam Baharuddin
Assistant Vice President (Safety and Sustainability), Sime Darby Property Berhad

No of participants: 119

CREAM-MKRM Laboratory Tour

Date : 14 February 2023



It's a pleasure to have representatives from Persatuan Kontraktor Bumiputera Malaysia (PKBM), Malaysia Iron & Steel Industry Federation (MISIF), Amsteel Mills Sdn Bhd and Mastrak Sdn Bhd to visit our CREAM-MKRM last 14th February 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.

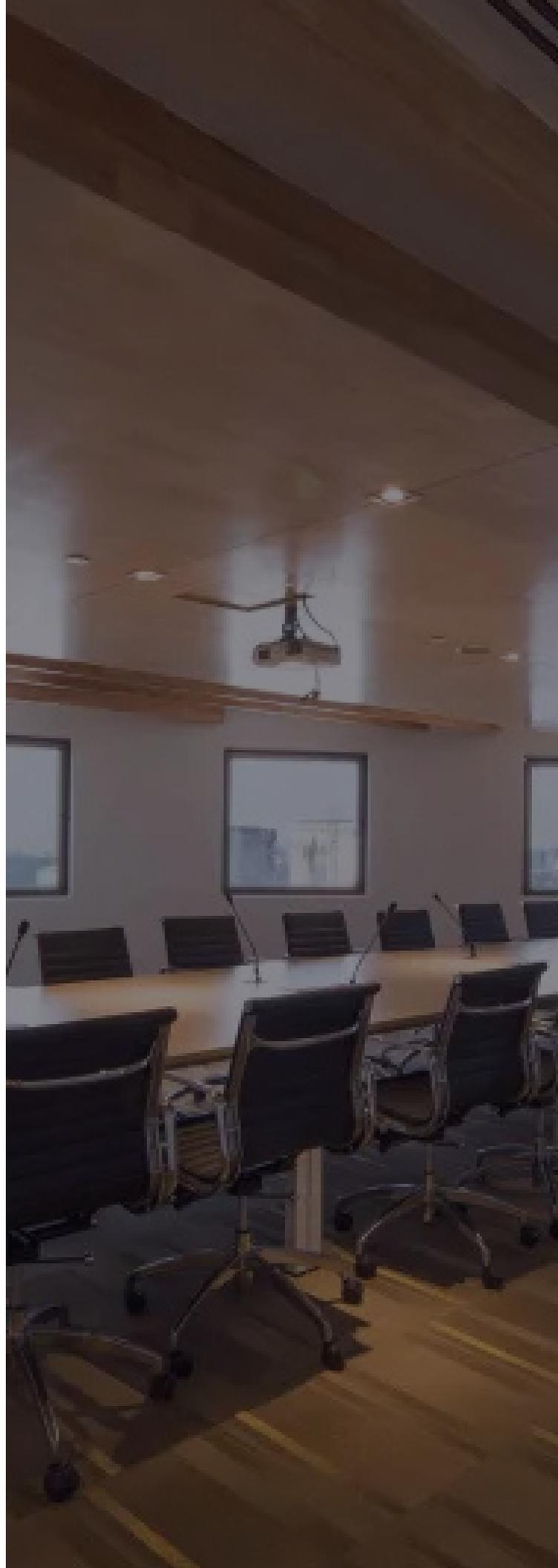
2 March 2023

Massive congratulations to Doka Formwork Malaysia Sdn Bhd for being certified under the program of Construction Product Approval (CPA).

The collaboration between CREAM & CIDB IBS Sdn Bhd has accelerated the CPA & IMPACT application process. CPA certifies 4 IBS product namely Metal Framing System, Timber Framing System, Reusable Formwork System, and Innovative System



upcoming events



CREAM Webinar Series 2023

Quality, Safety and Health Management System in Construction Industry

CREAM WEBINAR SERIES 2023 Quality, Safety and Health Management System in Construction Industry



10 CCD POINTS PER SESSION

Session 1: Contractor's Quality Management System (CQMS) CIS 29:2021 - An Alternate to ISO 9001:2015

29 March | 9AM - 12pm



TN. HJ. MOHAMMAD NAZRI ABDUL RANI
Managing Director,
Total Organisation Management Consulting Sdn Bhd. (TOMC)



TS. SYED HAZNI ABD GHANI
Manager,
Construction Research Institute of Malaysia (CREAM)

Session 2: Amendment to OSHA 1994 & The Proposed OSHCIM Regulations

30 March | 9AM - 12pm



IR. DR. MOHD FAIRUZ AB RAHMAN
Factory and Machinery Inspector,
Department of Occupational Safety and Health (DOSH)



DR. KAMARIZAN KIDAM
Senior Lecturer,
Universiti Teknologi Malaysia (UTM)



FEES: RM50
(per session) **Student: RM20**

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CREAMI
CONSTRUCTION RESEARCH
INSTITUTE OF MALAYSIA

1st DIGITAL CONSTRUCTION SUMMIT

14th – 15th March 2023
MATRADE Exhibition & Convention Centre (MECC),
Kuala Lumpur

**Accelerating Construction
through Digital Technologies**

**CPD/CCD
Available**

CIDB : 25 CCD
MBOT : 12 CPD
LAM : 03 CPD
BQSM : 06 CPD
BEM : 13 CPD



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leaders



Network with local and
international speakers



Digital construction
thought



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dcs2022@cream.my

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The Organiser

Construction Research Institute of Malaysia (CREAM) is a research institution of Construction Industry Development Board (CIDB) and company limited by guarantee dedicated to improve Malaysian construction industry through research and consultancy, certification as well as testing facilities. Established since 2004, CREAM will be the frontier in providing research insight in Construction 4.0, advanced materials, sustainability, forensic and structural engineering, IBS, construction productivity as well as affordable housing.

Why Need to Attend

- Thought speakers sharing of novel ideas with state of the art digitalisation
- Sharing best practices, demonstrating business case in construction digitalisation
- Business networking opportunities with industry leaders

About the Summit

The inaugural Digital Construction Summit (DCS2023) is a much awaited summit bringing us to high level discussion with key stakeholders in digital construction. It is a platform to discuss big things on digital trends, strategic planning for organisations, stock take potential and market size in ASEAN and East Asia region and impart benefits to construction digital growth.

4 Key Reasons to Participate in DCS2023

- A high-level international summit on digitalisation
- Gain the latest info and mega trends in digital construction
- Seek potential digital growth in ASEAN and East Asia region
- Develop new business linkages and opportunities with key players

Who Should Attend?

- Government leaders, policy makers and key decision makers
- High reputable construction contractors
- Consulting engineers
- Business leaders and entrepreneurs
- Academic and educationists
- Technologist and innovators
- Professional bodies and civil society leaders
- Digital investors
- Start-ups companies and talented digital entrepreneurs

DAY ONE: 14TH MARCH 2023 (TUESDAY)

TIME	PROGRAM
8.30 am – 9.00 am	Registration of participants
9.00 am – 9.15 am	Arrival of invited guests
9.15 am – 9.20 am	Arrival of YB Dato Sri Alexander Nanta Linggi, Minister of Works & YB Chang Lih Kang, Minister of Science And Technology (TBC)
9.20 am – 9.40 am	National Anthem Doa recitation Welcoming Remarks YBhg. Datuk Ir. Ahmad 'Asri bin Abdul Hamid, Deputy Chairman, Board of Trustee CREAM / Chief Executive of CIDB Malaysia
9.40 am – 10.10 am	Opening Speech by YB Dato Sri Alexander Nanta Linggi, Minister of Works (TBC)
10.10 am-10.30 am	Launching of Construction Sandbox by YB Chang Lih Kang, Minister of Science And Technology (TBC)
10.30 am – 11.00 am	Coffee break / Networking / Visit Exhibition Booths
11.00 am – 11.30 am	KEYNOTE ADDRESS 1 Professional and Leadership Roles in Digital Construction YBhg. Academician Tan Sri Ir. Dr. Ahmad Tajuddin Ali, FASc, Joint-Chairman (Industry), Malaysian Industry-Government Group for High Technology (MiGHT)
11.30 am – 1.00 pm	SESSION 1: Readiness of Digital Construction among Professional and Construction Practices in Endemic Phase: Where are We Going? Moderator : Ir Dr Zuhairi Abd. Hamid, FASc Speaker 1 : Board of Engineers Malaysia (BEM) Speaker 2 : Board of Architects Malaysia (LAM) Speaker 3 : Board of QS Malaysia (BQSM) Speaker 4 : Board of Town Planners Malaysia (LPBM) Speaker 5 : Prof Dato Dr Ahmad Farhan Mohd Sadullah, University of Science, Malaysia
1.00 pm – 2.30 pm	Lunch and Networking
2.30 pm – 3.00 pm	KEYNOTE ADDRESS 2 Addressing Women to Accelerate Industry 4.0 Technologies in Construction YBhg. Datuk Nik Airina Nik Jaffar Director, Special Projects and Corporate Finance, UEM Group Berhad / Board of Directors, CIDB Malaysia
3.00 pm – 5.00 pm	SESSION 2: Empowering Women Roles in Digital Transformation Moderator : Dr. Kavitha Muthy, Chief Strategy Officer, Intellize Tech Services Sdn. Bhd. Speaker 1 : Ms. Biruntha Mooruthi, Chief Commercial Officer, UNITEN R&D Sdn Bhd Speaker 2 : Ir Prof Dr Zuhaina Zakaria, Honorary Secretary, The Institution of Engineers, Malaysia Speaker 3 : Ms Rita Irina Abd Wahab Director of Government Affairs & Public Policy, Shopee Malaysia Speaker 4 : Dr. Rachel Gong, Deputy Director of Research at Khazanah Research Institute (KRI) Speaker 5 : Ar. Serina bt Hijjas, Principal of Hijjas Kasturi Associates
5.00 pm	End of session



DAY TWO: 15TH MARCH 2023 (WEDNESDAY)

TIME	PROGRAM
8.00 am – 9.00 am	Registration of participants
9.00 am – 9.30 am	KEYNOTE ADDRESS 3 Accelerating Built Environment Industry in Technology Adoption towards High Income Nation Datuk Seri Dr. Michael K C Yam, President of the Chartered Institute of Building (CIOB)
9.30 am – 11.00 am	SESSION 3: Driving Factors, Challenges, and Impacting Risks in Digital Technology Moderator : Prof Dato Ir Dr Mohd Salleh Jaafar, President Academy Professor of Malaysia (APM) Speaker 1 : Datuk Dr Mohd Yusoff Sulaiman, Chief Executive Officer of Malaysian Industry-Government Group For High Technology (MiGHT) Speaker 2 : Datuk Ar Ezumi Harzani Ismail, Director of Arkitek MAA Sdn. Bhd. Speaker 3 : Mr. Chow Sang Hoe, Consulting Managing Partner, Ernst & Young Consulting Sdn Bhd Speaker 4 : Mr. Oliver H C Wee, President Master Builders Association Malaysia (MBAM) Speaker 5 : Mr Girish M Ramachandran Executive Director, 27Advisory
11.00 am – 11.15 am	Coffee break / Networking
11.15 am – 1.00 pm	SESSION 4: Digital Economy and How Globalisation is Impacting Its Growth and Trends Moderator : Ir. Dr. Megat Zuhairy Megat Tajuddin, Subject Matter Expert (SME) Public Works Department (JKR) Speaker 1 : Mr. Oliver Roche, Managing Director, Proficient Chairman, Eurocham Malaysia Speaker 2 : Mr. Alex Liew, Secretary, The National Tech Association of Malaysia (PIKOM) Speaker 3 : Mr. Abdul Qavi Mohammed, Associate Partner, McKinsey's Malaysia Speaker 4 : Mr Denis Branthonne, Founder & Chief Executive Officer, Novade Solutions Speaker 5 : Datuk Hj. Azman bin Hj. Yusoff, President of Persatuan Kontraktor Bumiputera Malaysia (PKBM)
1.00 pm – 2.15 pm	Lunch and Networking
2.15 pm – 2.45 pm	KEYNOTE ADDRESS 4 5G for All : Accelerating a Digital Future for Malaysia Mr. Prem Kumar Menon Head of Enterprise Strategy, Digital Nasional Berhad (DNB)



2.45 pm – 5.00 pm	SESSION 5: Business Case Experience in Digital Construction Projects	
	SESSION 5A: Moderator: Ir. Dr. Mohamad Jamil Sulaiman Speaker 1: Ts Lim Hui Yan Executive Director of Gamuda Engineering Sdn Bhd Speaker 2: Ir. How Yoke Teng Senior Manager, Virtual Design & Construction (VDC) Sunway Construction Speaker 3: Mr Wilson Ong Built Environment Sector Lead, British Standard Institution Speaker 4: Ms Yuslina Mohd Yunus Head Product Development (Township), Sime Darby Property Berhad Speaker 5: Mr. Gary Lee Senior Advancement Manager, Construction, Bentley Systems	SESSION 5B: Moderator: Assoc. Prof. Dr. Helen Tan Director of Strategy Management Office of Strategy and Corporate Affairs, Universiti Teknologi Malaysia (UTM) Speaker 1: Mr Azman Azeez Founder And Chief Executive Officer, KA Bina Consultancy Group Sdn Bhd Speaker 2: Dato' Sr. Dr. Mohd Mazlan Bin Hj. Che Mat, Founder & President, MCM Value Sdn Bhd Speaker 3: Mr James Tan Project Director, ORANGEBEAM Construction Sdn Bhd Speaker 4: Ar. Ts. Afi Muhaimin Jamalludin Director of Studio KAIZEN
5.00 pm	End of session	

PLEASE NOTE:

The schedule/ programme above is tentative and is subject to change. The organiser will keep participants informed on any changes relating to the content and speakers of the summit.



CONFIRMATION REGISTRATION

Participant registration is through the QR Code. The secretariat will respond within 3 working days. Should you not receive the confirmation letter/email, please contact us immediately.

TERMS OF PAYMENT

Full payment must be made to CREAM before the actual event day. For payment through bank transfers, kindly ensure you send us a copy of your bank receipt and details, otherwise the payment may not be acknowledged by CREAM.

Payment details:

Name of company : Construction Research Institute of Malaysia
Name of bank : CIMB Bank
Account Number : 8000640665

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Secretariat Registration
Digital Construction Summit (DCS) 2022
Construction Research Institute of Malaysia (CREAM)
Level 29, Sunway Putra Tower
No. 100, Jalan Putra
50350 Kuala Lumpur.

T: 03-2779 1479 F: 03- 2779 1474
Email : dcs2022@cream.my

CANCELLATION

CREAM as the main organiser reserves the right to replace/change speakers/panellists or itinerary in the best interest of summit. Hence, you will still be charged if your participants don't turn up on the day of the event.



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