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GUIDELINES FOR TEMPORARY PRECAST CONCRETE CASTING YARD FOR BUILDING PROJECTS IN MALAYSIA

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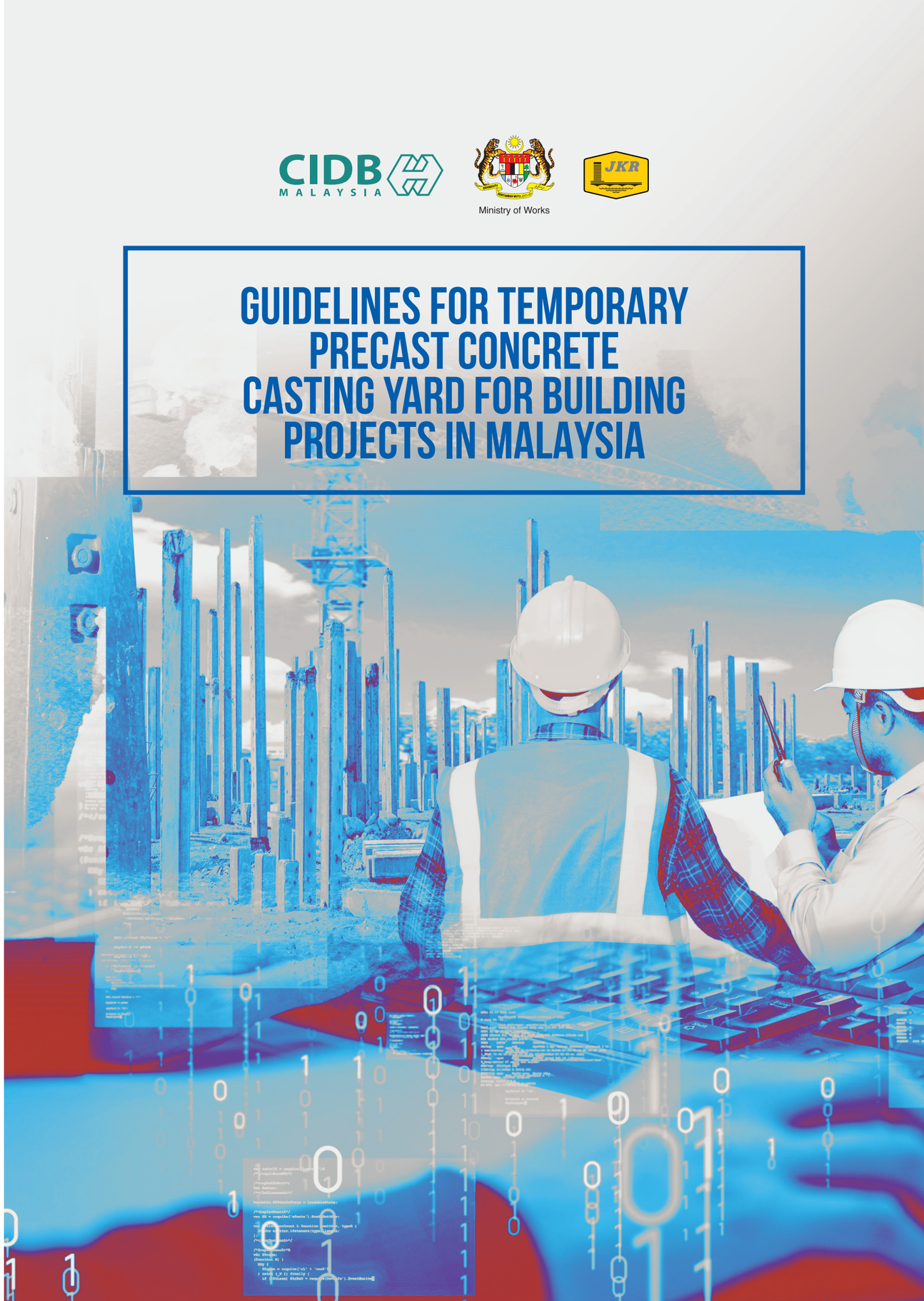

Guidelines for Temporary Precast Concrete Casting Yard for Building Projects in Malaysia

CIDB MALAYSIA

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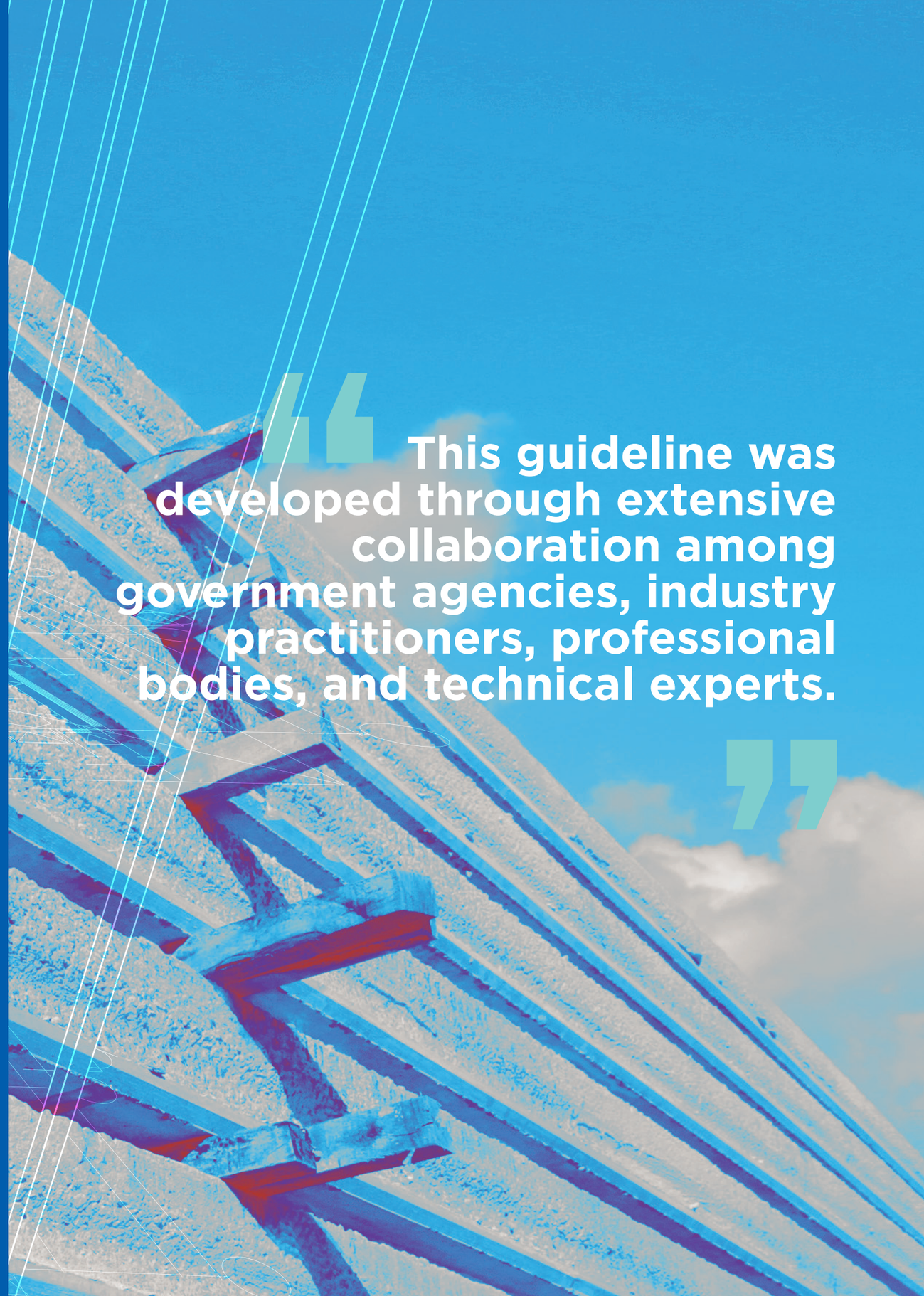

Foreword

Malaysia's construction sector is undergoing an important phase of modernisation, guided by the National Construction Policy (NCP2030), the Construction 4.0 Strategic Plan, and our wider national sustainability commitments. To support these aspirations, the industry must continue to adopt industrialised, technology-enabled, and resource-efficient construction methods.

Industrialised Building System (IBS) remains central to this transformation. Its contribution to higher quality, improved efficiency, better safety performance, and greater cost predictability is well established. As development expands into rural, remote, and rapidly growing areas, the ability to produce precast components closer to project locations becomes increasingly important. Temporary Precast Concrete Casting Yards offer a practical and effective solution by reducing logistical constraints, improving delivery reliability, and enabling broader participation from regional contractors and local communities.

This guideline provides a clear national reference for the planning and establishment of Temporary Casting Yards. It supports the Government's objectives to enhance productivity, minimise wastage, encourage innovation, and reduce carbon emissions associated with long-distance transportation. It also contributes to more balanced regional development by ensuring that IBS manufacturing capability is accessible even in areas where permanent factories may not be feasible.

Equally important is maintaining public confidence in the quality and safety of our built environment. Every precast component used in Malaysian projects—whether produced in a permanent plant or a temporary facility—must meet approved standards and support a more resilient, accountable, and transparent construction ecosystem.

I commend the Construction Industry Development Board (CIDB) Malaysia for taking the initiative to develop this guideline, demonstrating its continued commitment to supporting industry capability and strengthening Malaysia's transition towards modern and sustainable construction practices. CIDB's leadership in advancing quality assurance, regulatory alignment, and industry readiness remains essential to the nation's progress.

I also extend my appreciation to the Construction Research Institute of Malaysia (CREAM), the Technical Committee members, and all participating experts for their dedication and contributions. Their collective insights have ensured this guideline is practical, implementable, and aligned with industry needs.

As Malaysia moves towards a more industrialised, technology-driven construction future, I encourage all stakeholders to adopt this guideline as a standard of reference. Together, we can enhance governance, strengthen industry capability, and build a construction sector that is ready to meet the nation's long-term development goals.

Dato Sri Alexander Nanta Linggi
Minister of Works
Ministry of Works, Malaysia

Message From
The Chief Executive

The publication of the **Guidelines for Temporary Precast Concrete Casting Yard for Building Projects in Malaysia** marks an important step in strengthening technical governance, regulatory compliance, and operational consistency across the IBS supply chain. As the national authority responsible for construction quality, standards, and regulatory enforcement, CIDB Malaysia recognises the increasing reliance on Temporary Casting Yards to support timely, coordinated project delivery nationwide.

To maintain confidence in IBS implementation, all precast components—whether produced in a permanent factory or a temporary facility—must comply with the same technical requirements, safety standards, and certification processes. Temporary Casting Yards must therefore operate with clear processes, proper documentation, and consistent quality control. Compliance with Product Certification (PC), Perakuan Pematuhan Standard (PPS), and the relevant provisions of Act 520 is essential to ensuring that all components meet national specifications and are traceable throughout the construction process.

This guideline provides detailed technical and operational requirements for the planning, establishment, and management of Temporary Casting Yards. It outlines key elements, including site selection criteria, layout configuration, production workflow, material handling procedures, occupational safety practices, environmental controls, and demobilisation processes. These requirements give contractors, consultants, and local authorities the clarity needed to manage risks, minimise delays, and ensure that work is carried out in accordance with approved standards.

CIDB Malaysia remains committed to supporting industry stakeholders through capacity-building initiatives, technical audits, compliance monitoring, and continuous engagement with practitioners. Strengthening documentation, process discipline, and quality assurance across Temporary Casting Yards is essential to building a reliable, well-coordinated IBS supply chain.

I would like to extend my sincere appreciation to the various government agencies, industry stakeholders, professional bodies, and technical practitioners who contributed to the development of this guideline. Their practical insights and collaboration have been invaluable in ensuring that the guideline reflects real operational needs and supports effective implementation on the ground.

Special acknowledgement is also given to the Construction Research Institute of Malaysia (CREAM) for providing technical support during the drafting process, as well as to the members of the Technical Committee for their commitment and expertise. Their contributions have been instrumental in shaping a guideline that strengthens industry practices and enhances compliance across the sector.

I hope that this guideline will serve as a reliable reference for improving governance, enforcing standards, and elevating overall industry readiness. CIDB Malaysia will continue to work closely with all partners to advance safer, more efficient, and technically sound construction practices nationwide.

Zainora Zainal
Chief Executive,
Construction Industry Development Board, Malaysia

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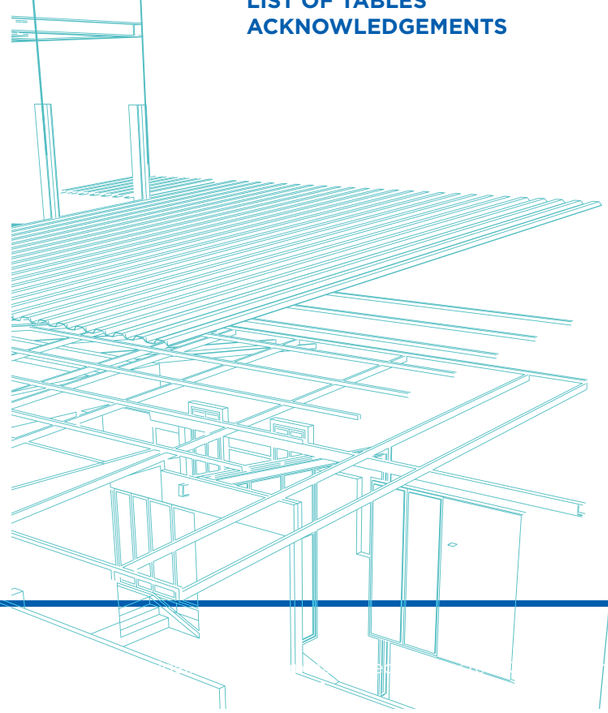


Executive Summary

This guideline provides a clear and standardised reference for the planning, approval, operation, and demobilisation of Temporary Precast Concrete Casting Yards for building projects in Malaysia. As the construction sector advances under the National Construction Policy 2030 (NCP2030), the Construction 4.0 Strategic Plan, and strengthened regulatory frameworks, the need for well-regulated, safe, and high-quality precast production facilities has become increasingly significant.

Temporary Casting Yards play an important role in supporting Industrialised Building System (IBS) implementation, particularly in rural, remote, and large-scale project areas where access to certified manufacturing facilities is limited. Establishing casting yards closer to project sites reduces transportation risks, shortens delivery times, lowers logistics costs, and enhances overall project reliability and productivity. This approach also encourages broader regional participation and supports national sustainability goals by reducing carbon emissions associated with long-distance haulage.

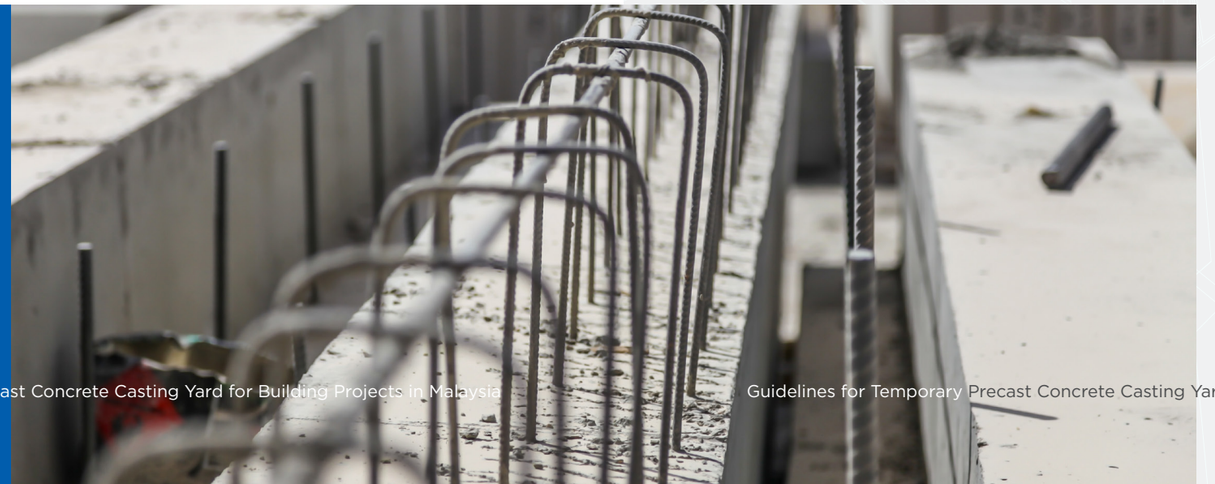
Despite these advantages, industry studies have highlighted gaps relating to IBS readiness, supply chain distribution, safety compliance, environmental management, and regulatory coordination for temporary precast operations. These issues demonstrate the need for a unified reference to promote consistent, safe, and compliant practices across all temporary facilities.

This guideline provides systematic instructions covering the following areas:

- **Planning, land use, and approval pathways** for both on-site and off-site Temporary Casting Yards, including the Local Authority (PBT) approval process.
- **Regulatory and certification requirements,** including Perakuan Pematuhan Standard (PPS) for IBS components under Act 520 and Product Certification (PC).
- **Operational requirements,** covering zoning, infrastructure, equipment needs, production workflow, internal logistics, and lifting operations.
- **Safety, welfare, and environmental management practices,** aligned with OSHA 1994, DOE regulations, JKKP requirements, and Local Authority by-laws.
- **Quality assurance and quality control (QAQC)** procedures, supported by recommended documentation templates and a structured Production Quality Plan (PQP).
- **Demobilisation procedures,** outlining steps for site restoration, handover, and regulatory compliance at the end of operations.

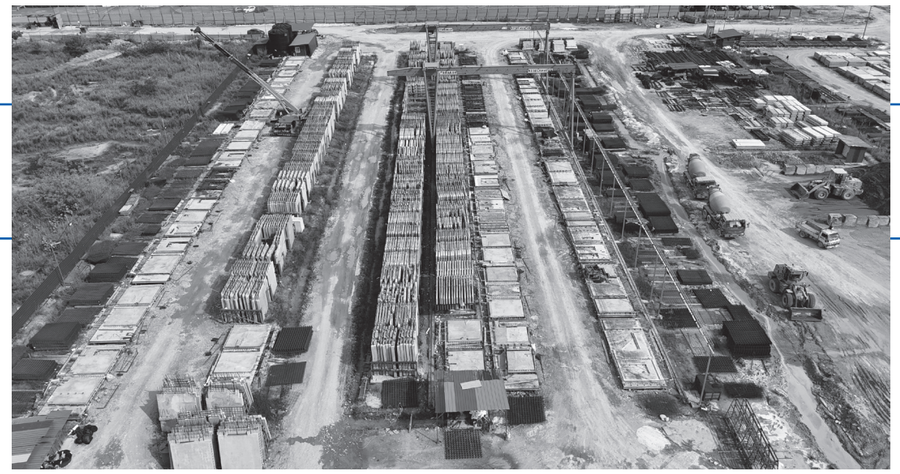
The guideline also supports mandatory IBS Score requirements for public and private sector projects and contributes to Malaysia's broader digitalisation, sustainability, and productivity objectives. It is intended for developers, contractors, consultants, regulators, certification bodies, and all stakeholders involved in IBS delivery and temporary precast concrete operations.

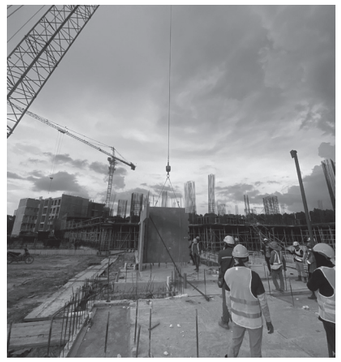
By adopting this guideline, stakeholders can strengthen governance, reduce operational risks, enhance regulatory compliance, and achieve greater consistency and efficiency in the production of precast components—supporting a safer, more productive, and future-ready construction industry for Malaysia.



Editorial

The Construction Industry Development Board (CIDB) Malaysia has developed the Guideline for Temporary Precast Concrete Casting Yards for Building Projects in Malaysia to support the industry in strengthening IBS delivery, enhancing compliance, and improving operational consistency nationwide. This publication reflects CIDB's ongoing commitment to advancing construction quality, safety, and governance across all precast-related activities.





About The Guide

This guideline has been developed to provide a clear, standardised, and practical reference for the planning, establishment, operation, and demobilisation of Temporary Precast Concrete Casting Yards for building projects in Malaysia.

It responds to issues identified in previous national studies and aligns with evolving government policies that emphasise the need for stronger IBS implementation and more consistent precast management.

Research such as *Kajian Hubungan Antara Permintaan dan Pengeluaran dalam Industri IBS di Malaysia* and *Kajian Pendekatan Strategik bagi Memperkasakan Pelaksanaan IBS di Sarawak* highlighted challenges related to supply chain distribution, long transportation distances, logistical inefficiencies, and inconsistent operational practices. These issues are particularly evident in regions with limited access to certified precast manufacturers. The findings reinforce the need for temporary casting facilities that can support timely project delivery and reduce risks associated with logistics and site coordination.

Government directives further strengthen the importance of IBS adoption. Under **Pekeliling Perbendaharaan PK 1.10**, public sector projects valued at RM10 million and above must achieve a minimum IBS Score of 70. Meanwhile, **Pekeliling KSU KPKT Bil. 4/2024** requires private developments exceeding RM50 million and with a gross floor area greater than 50,000 m^2 to achieve the same minimum score. CIDB has been appointed as the **External Technical Agency** to support and monitor compliance with these requirements, underscoring the need for proper planning, quality control, and management of precast production at the project level.

This guideline aims to support stakeholders—including developers, contractors, consultants, regulatory authorities, certification bodies, and industry practitioners—by providing structured guidance on:

- **establishing temporary casting facilities in compliance with legal and technical requirements**
- **understanding submission processes and approval pathways**
- **ensuring certified, safe, and quality-controlled precast production**
- **improving operational coordination, documentation, and traceability**
- **meeting mandatory IBS Score requirements and supporting national policy goals**

By offering a unified reference, this guideline helps promote safer work practices, consistent quality assurance, and improved governance throughout the IBS precast supply chain. It is intended to be used alongside national legislation, local authority by-laws, industry standards, and CIDB technical documents relevant to precast concrete production and IBS implementation.

Abbreviations

BOMBA	Jabatan Bomba dan Penyelamat Malaysia (Fire and Rescue Department of Malaysia)
CB	Certification Body
CCPM	Certification of Construction Product & Material
CIDB	Construction Industry Development Board
CIS	Construction Industry Standard
CLQ	Centralised Labour Quarters
DO	Delivery Order
DOE	Department of Environment (Jabatan Alam Sekitar)
ESG	Environmental, Social and Governance
HIRARC	Hazard Identification, Risk Assessment and Risk Control
IBS	Industrialised Building System
IB	Inspection Body
ID	Identification
JKKP	Jabatan Keselamatan dan Kesihatan Pekerjaan (Department of Occupational Safety and Health)
JKR	Jabatan Kerja Raya (Public Works Department)
JPS	Jabatan Pengairan dan Saliran (Department of Irrigation and Drainage)
KPKT	Kementerian Perumahan dan Kerajaan Tempatan (Ministry of Housing and Local Government)
LOA	Letter of Award
MOH	Ministry of Health
MIDA	Malaysian Investment Development Authority
MNKT	Majlis Negara bagi Kerajaan Tempatan (National Council for Local Government)
NCR	Non-Conformance Report
OSHA	Occupational Safety and Health Act
PBT	Local Authority (Pihak Berkuasa Tempatan)
PC	Product Certification
PPE	Personal Protective Equipment
PPS	Perakuan Pematuhan Standard
QA	Quality Assurance
QC	Quality Control
RM	Ringgit Malaysia
SDS	Safety Data Sheet
SO	Superintending Officer
TB	Testing Body

1 Introduction

- Overview
- Responsibilities of Relevant Parties
- Normative References

1 Introduction

Temporary Precast Concrete Casting Yards support effective IBS implementation by enabling precast components to be produced closer to project sites, particularly in areas without access to certified permanent factories. Their use helps reduce transportation risks, shorten delivery times, lower logistics costs, and improve overall project reliability and productivity. However, establishing such facilities requires proper planning, regulatory compliance, and systematic management to avoid issues related to land use, certification, safety, and environmental control.

This guideline provides a standardised reference covering planning, approvals, site setup, operations, quality assurance, safety, environmental protection, and demobilisation. It aligns with national policies such as NCP2030, the Construction 4.0 Strategic Plan, and relevant government circulars. The aim is to ensure that Temporary Casting Yards operate safely, efficiently, and in full compliance with requirements—ultimately supporting higher project quality, better resource management, and a more resilient and productive construction industry.

1.1 Overview

The adoption of the IBS in Malaysia has encouraged wider use of Temporary Precast Concrete Casting Yards, which are non-permanent facilities established on-site or near project locations for the production of precast components such as beams, panels, columns, and slabs. These yards provide a practical solution for fast-track projects and developments in areas without convenient access to certified permanent manufacturers. Their close proximity to construction sites enhances scheduling efficiency, improves resource utilisation, and strengthens coordination between fabrication and installation teams.

Clear guidance is necessary to ensure these facilities are planned and managed in accordance with regulatory, safety, quality, and environmental expectations. This guideline offers a structured reference to support consistent and compliant practices throughout the lifecycle of a Temporary Casting Yard, while incorporating Environmental, Social, and Governance (ESG) considerations into day-to-day operations. **Figure 1** highlights the ESG contributions of a Temporary Precast Concrete Casting Yard and its alignment with National Construction Policy 2030 (NCP2030) priorities.

01 | Environmental Responsibility

- Promote green and low-carbon construction practices
- Adoption of IBS and precast to reduce construction waste
- Circular economy: reuse and recycle construction materials (e.g., concrete, aggregates)
- Compliancewith green standards (GBI, MS EN, international benchmarks)
- Efficient energy and water management at project sites

02 | Social Benefits

- Human capital development through continuous training and skills certification
- Reduce reliance on foreign workers via IBS, automation, and digital technologies
- Priorities worker health and safety (OSH compliance)
- Improve communitiy qualiti of life through sustainable and inclusive infrastructure
- Community engagement in remote and rural construction projects

03 | Governance Responsibility

- Compliance with government policies and circulars (e.g.,IBS Score 70 requirement)
- Integrity, transparency, and accountability in project delivery
- Government incentives for BIM, IBS, digitalisation, and green adoption
- Certification of IBS factories and products by CIDB and recognised authorities
- Strengthening public-private partnerships and inter-agency collaboration

Figure 1. Key ESG contributions of a temporary precast concrete casting yard.

1.2 Responsibilities of Relevant Parties

Establishing and operating a temporary precast concrete casting yard requires coordinated efforts from multiple stakeholders. Understanding each party's role ensures compliance, quality, and safety throughout the project. **Table 1** outlines the typical responsibilities of key stakeholders involved.

Table 1. Roles and responsibilities of key stakeholders.

Stakeholder	Responsibilities
Developer/ Project Owner	Responsible for ensuring compliance with all legal and regulatory requirements, establishing the project's OSH policy, ensuring risks are identified and controlled, appointing competent contractors with adequate OSH capabilities, and obtaining the necessary approvals from relevant authorities.
Contractor	Responsible for establishing and managing the casting yard, implementing safe systems of work, conducting HIRARC, ensuring workers receive adequate training and PPE, complying with all OSHA 1994 requirements, maintaining production quality, and managing approval submissions to relevant authorities.
Consultant	Responsible for reviewing and endorsing design documents to ensure they do not pose safety or health risks, providing technical input for safe yard planning, identifying foreseeable design-related hazards, advising mitigation measures, and carrying out inspections during setup and production stages where required.
Authorities	Responsible for issuing relevant permits, enforcing regulations related to health, safety, and the environment, and conducting periodic inspections.
Supplier/ Manufacturer	Responsible for supplying certified materials in compliance with PPS requirements and ensuring all precast concrete products are certified by a CIDB-recognised Certification Body. Approved construction products and materials listed in the Fourth Schedule of the CIDB Act 520, along with registered Certification Bodies, are accessible through the Certification of Construction Product & Material (CCPM) portal.
Certification Body (CB)	Responsible for evaluating and confirming that a product meets specified standards through impartial assessment, ensuring compliance with regulations, and protecting client confidentiality.
Inspection Body (IB)	Responsible for independently examining products to verify compliance with specified requirements, ensuring impartiality, accuracy, and alignment with relevant standards and regulations.

Stakeholder	Responsibilities
Testing Body (TB)	Responsible for conducting laboratory tests and measurements on samples to verify compliance with specified requirements, following standardised methods to ensure accuracy, reliability, and consistency.
Owner of Machinery/ Equipment	Responsible for ensuring that all machinery, plant, and equipment provided for use in the casting yard are safe, fit for purpose, and maintained in a condition that prevents risks to safety and health in accordance with OSHA 1994. Also responsible for providing adequate safety information such as operating manuals, hazard warnings, and maintenance records, and ensuring that only trained, competent, and authorised personnel are permitted to operate the machinery.
Owner/ Occupier of the Casting Yard	Responsible for ensuring that the casting yard premises are safe and suitable for operations, including maintaining safe access and egress, traffic routes, lighting, utilities, drainage, housekeeping, and emergency arrangements. Also responsible for managing risks arising from the condition of the premises, coordinating with contractors on safety matters, and fulfilling the duty under OSHA 1994 Section 17 to ensure the safety and health of persons other than employees who may be affected by activities at the yard.

1.3 Normative References

The documents listed below are essential to implementing of this guideline. The applicable version is the most recent, including any amendments.

1. **Act 520** – Lembaga Pembangunan Industri Pembinaan Malaysia Act 1994
   - **Schedule 3**: Skilled Construction Worker
   - **Schedule 4**: Standards for Certification of Construction Material
2. **Act 514** – Occupational Safety and Health Act 1994 and its subsidiary regulations
3. **Act 156** – Industrial Coordination Act 1975
4. **Act 127** – Environmental Quality Act 1974
5. **Act 172** – Town and Country Planning Act 1976
6. **Act 133** – Street, Drainage and Building Act 1974
7. **Act 56** – National Land Code 1965
8. **BS EN 13369** – Common Rules for Precast Concrete Products
9. **CIS 24** – Industrialised Building System (IBS) Assessment & Certification
10. **CIS 21** – Ready-mixed Concrete: Production, Conformity, Transportation and Delivery Criteria for Producers
11. **CIS 9** – Guidelines On Handling, Transportation, Stacking and Installation of Precast Concrete Components
12. **Department of Environment (DOE) Guidelines** - Includes guidelines under Act 127 for construction site management, waste handling, and impact declarations
13. **Local Authorities Regulations and Guidelines** - For planning, approval, and monitoring of temporary structures, access roads, drainage, and land use for a temporary precast concrete casting yard
14. **CPBS 103 Dilapidation Survey Code of Practice** – Provides the standard methodology for conducting dilapidation surveys, ensuring accurate baseline documentation of surrounding structures before the establishment of a temporary precast concrete casting yard. Applicable to both on-site and off-site locations
15. **UBBL 1984** – Uniform Building By-Laws

20 Planning and Approval

- Suitability of the Casting Yard Site
- Application Process for Approval from Relevant Authorities
- Certification Process for Precast IBS Products
- Practical Guidance for Submission and Compliance
- Summary of Approval Pathways

2.0 Planning and Approval

Proper planning and engagement with the relevant authorities are fundamental for establishing a temporary precast concrete casting yard. To avoid delays and minimise issues arising from unclear documentation, it is strongly recommended that complete applications be prepared and submitted promptly. This section outlines the structured steps for setting up projects under both the government and private sectors.

2.1 Suitability of the Casting Yard Site

Site selection should prioritise safety, accessibility, and compliance with land-use regulations. The following criteria, as shown in **Table 2,** should be considered:

Table 2. Minimum requirements for temporary precast concrete casting yard planning.

Criterion	Minimum Requirement
Access and Traffic	The site should have clear, unobstructed (vertically and horizontally) access for trailers, cranes, and delivery vehicles at all times, with roads that are safe and suitable for heavy vehicles. Access routes should be maintained in good condition, including any necessary road repairs, surface improvements, and the installation of appropriate signage where required. Delivery routes for materials and precast components should follow designated supply roads approved by the relevant authority.
Ground Condition	The ground should be level, well-compacted, and properly drained to support heavy equipment and safe operations.
Land Ownership	If the developer does not own the land, written consent from the legal landowner should be obtained.
Land Status	For land not categorised as industrial use, a Temporary Occupation Licence (TOL) or special permit under the National Land Code (Act 56) must be obtained from the relevant Land Office before establishing the casting yard.
Space Availability	Sufficient space should be available to accommodate casting, curing, storage, machinery movement, and facilities for worker welfare.
Site Location	Preferably located off-site or within the project buffer zone, subject to approval by the relevant authority.
Skilled Workers	Ensure all workers hold valid CIDB Green Cards. Core activities (formwork, rebar, casting, lifting) should be carried out by trained personnel (should have minimum CIDB SKKP Level 1 and 2) with basic knowledge of safety practices and equipment use.
Safety and Security	The yard should be equipped with basic safety measures (e.g., signage, PPE enforcement, first aid kits) and secured with perimeter hoarding (if required), lighting, and controlled entry points.
Utilities Availability	Adequate access to water supply, electricity (or generator), and basic temporary sanitation facilities.
Zoning and Land Use	Site zoning or temporary approval should comply with local authority regulations for temporary structures or industrial use.

Note: The proposed temporary precast concrete casting yard location should be indicated in the *'temporary building'* submission to the authority, where applicable.

2.2 Application Process for Approval from Relevant Authorities

Before establishing a temporary precast concrete casting yard, the main contractor or developer should secure the necessary approvals from the relevant regulatory authorities. These requirements may vary depending on the local authority's jurisdiction, the type of project, and land ownership status (a consent letter should be obtained if required). Approval processing times can vary widely and are subject to the authority's discretion. Engaging with the relevant authority early is recommended to prevent potential delays. In all cases, the temporary precast concrete casting yard should be included in the temporary building application submitted through the relevant local authorities. The overall approval and notification process is illustrated in **Figure 2.**

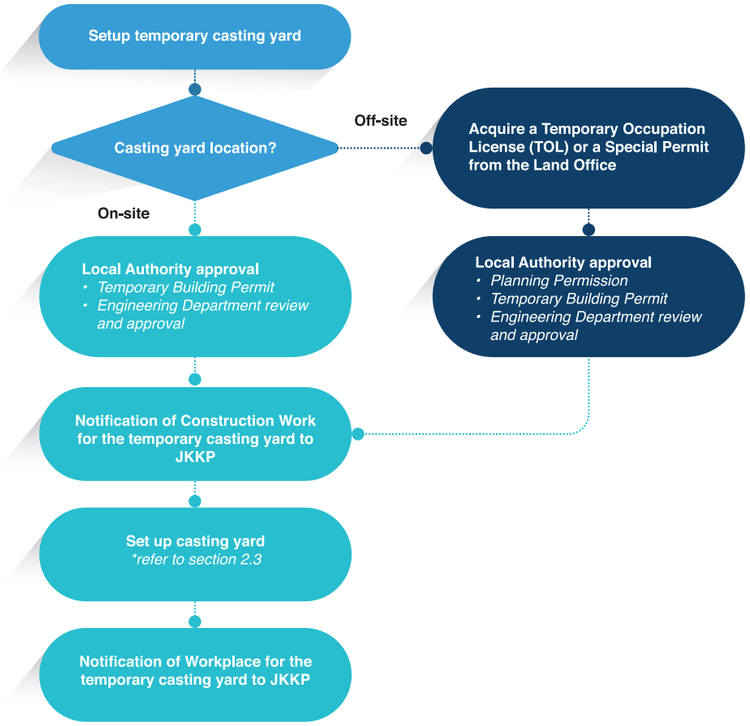


Figure 2. Approval and notification process for temporary precast concrete casting yards.

2.2.1 Government Project Approval Pathway

For government projects, contractors are typically appointed through formal tender procedures. During the tender submission stage, the contractor is required to name a registered and active precast concrete manufacturer with a valid PPS.

The contractor should formally appoint the named manufacturer within four (4) months after possession of the site. This is to ensure that all planning, setup, and certification processes proceed smoothly and to avoid delays to the overall project timeline.

If the proposed temporary precast concrete casting yard is located within the project site, the approval should be obtained from the Superintending Officer (SO). For a temporary precast concrete casting yard located outside the project site, additional approval from the local authorities and written consent from the landowner are required. The typical approval pathway for a government project is illustrated in **Figure 3.**

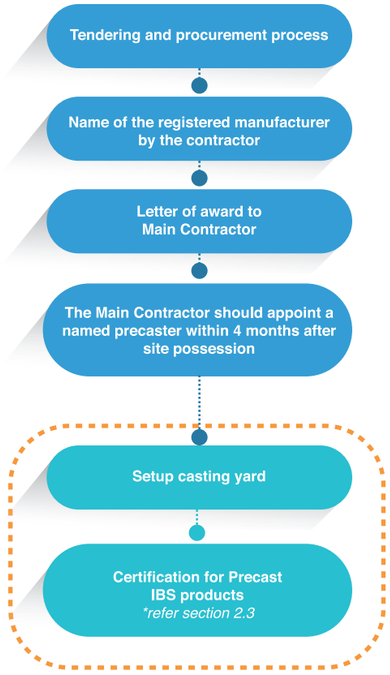


Figure 3. Typical approval pathway for setting up a temporary precast concrete casting yard for government projects.

Note: Approval to set up and use land within the project site for a casting yard must be obtained through the SO of the project. For yards located outside the project site, approval must also be obtained from the local authorities and the landowner.

2.2.2 Private Projects Approval Pathway

Private projects offer more flexibility in planning, but they still require formal applications to be submitted through the local authority. If the temporary precast concrete casting yard is located within the project site, it should be included in the application for temporary buildings.

If the temporary precast concrete casting yard is located outside the site, the contractor or developer should obtain approvals from the local authorities and the landowner. All relevant plans—including site layout, zoning compliance, and safety provisions—should be submitted following the local council's requirements. The typical approval pathway for a private project is illustrated in **Figure 4.**

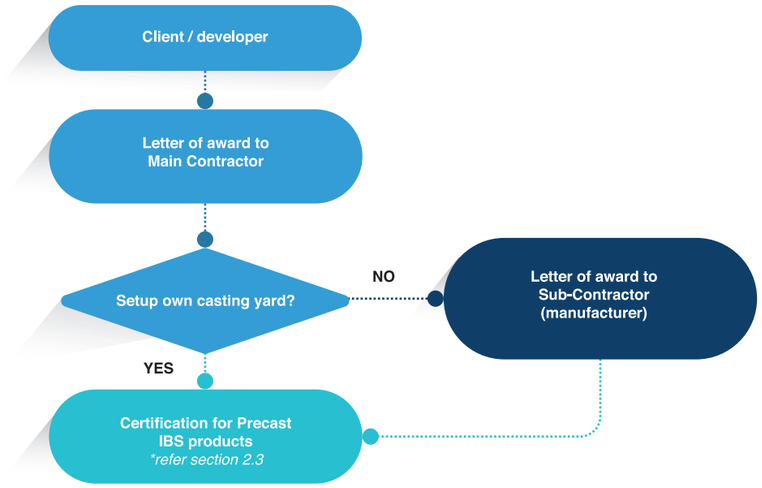


Figure 4. Typical approval pathway for setting up a temporary precast concrete casting yard for private projects.

Note: Approval to set up and use land within the project site for a casting yard must be obtained through the client or developer and included in the temporary building submission. For yards located outside the project site, approval must be secured from the local authorities and the landowner. Traditionally, temporary building applications are made by the main contractor; however, to expedite the process, it is recommended that the application be initiated during the planning stage.

2.3 Certification Process for Precast IBS Products

All precast concrete products should be produced under an approved certification pathway to ensure quality, traceability, and compliance with Malaysian construction standards. The main certification requirements are summarised in **Table 3.**

Table 3. Certification process and regulatory requirements for IBS precast concrete products.

Certification	Description	Estimated processing period[2]	Validity	Executing body
Product Certification (PC)	The manufacturer / precaster should first obtain Product Certification to ensure compliance with recognised Product Standards[1].	3 months	1 year	CB
Perakuan Pematuhan Standard (PPS)	PPS is mandatory under Act 520, Section 33B and the Fourth Schedule for any IBS product used in construction works. PPS will only be issued after successful compliance with both PC and CIS 24 requirements.	15 days from the completed document	1 year	CIDB

Notes: [1]For IBS precast products without a product standard, the manufacturer / precaster should refer to CIS 24 for product compliance. [2]The processing period is estimated based on ideal conditions and is subject to variation due to unforeseen circumstances, changes in requirements, or factors beyond reasonable control. The minimum requirements and supporting documents for certification application are provided in **Annexe A: Certification Requirements**.

Following this sequence helps ensure manufacturer eligibility for government projects and avoids delays in approval for private projects. **Figure 5** illustrates the flow of the PPS issuance process. Detailed requirements for PC and PPS applications are provided in Annexe A.

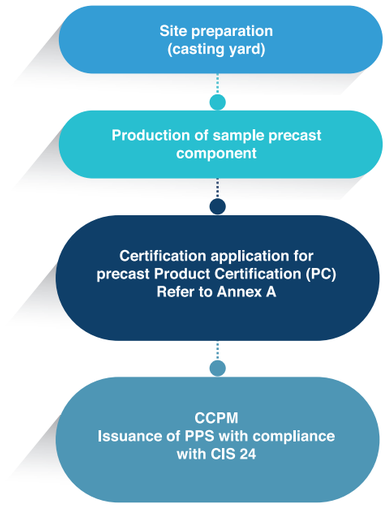


Figure 5. PPS issuance process for IBS precast concrete products.

2.4 Practical Guidance for Submission and Compliance

Based on common challenges encountered during planning and authority submissions, the following best practices are recommended to help streamline the approval process and reduce delays for a temporary precast concrete casting yard:

01

Appoint a Certified Manufacturer

Appointed manufacturers shall be registered with CIDB and hold a valid PPS. New manufacturers without prior experience are encouraged to form joint ventures with existing registered manufacturers to ensure compliance and smooth operations.

02

Include Temporary Precast Concrete Casting Yard Details in Early Submissions

Temporary precast concrete casting yard details (layout, location, zoning, etc.) should be included in temporary building applications.

03

Engagement with Authorities

Initiate early discussions with relevant authorities to clarify land use, fire safety, and utility requirements.

04

Certification Bodies Engagement

Early coordination helps clarify expectations and smooth audit processes.

05

Certification for IBS Precast Concrete Products

All precast concrete products should have PPS before installation.

06

Cross-Agency Regulatory Compliance

Compliance with all regulatory bodies, including CIDB, JKR, DOE, BOMBA, JKKP, local authorities and other relevant agencies.

2.5 Summary of Approval Pathways

Approval requirements vary depending on the project ownership and the location of the temporary precast concrete casting yard. **Table 4** below provides a concise summary to support early planning and engagement with the relevant authorities. For a detailed description of the process, refer to Sections 2.2.1 and 2.2.2.

Table 4. Approval pathways for government and private projects.

Project Type	Temporary Precast Concrete Casting Yard Location	Approval Required From	Remarks
Government	Within the project site	Superintending Officer (SO)	The yard location should be submitted to and approved by the SO.
	Outside the project site	SO, Landowner and Local Authority, Land Office Approval (if applicable)	Subject to zoning, consent, and environmental conditions.
Private	Within the project site	Developer/ Client/ Main Contractor via Local Authority	The yard location should be included in the submission.
	Outside the project site	Landowner and Local Authority, Land Office Approval (if applicable)	Compliance with land use and safety provisions is mandatory.

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Temporary Precast Concrete Casting Yard Set-Up and Operation

- Zoning, Infrastructure, and Production Workflow
- Safety, Site Welfare, and Operational Practices
- Quality Assurance and Quality Control (QAQC)
- Internal Logistics, Storage and Preparation for Delivery
- Environmental Management

3.0 Temporary Precast Concrete Casting Yard Set-Up and Operation

An efficiently set-up temporary precast concrete casting yard contributes directly to the quality, productivity, and safety of IBS projects. The yard layout should support seamless production flow, material handling, and compliance with regulatory requirements. This section outlines zoning concepts, operational needs, and recommended infrastructure for a temporary precast concrete casting yard.

3.1 Zoning, Infrastructure, and Production Workflow

3.1.1 Layout Planning and Classification

Based on project size, land availability, and production targets, three types of layout configurations are recognised as shown in **Table 5** below:

Table 5. Typical layout configurations.

Layout Type	Application	Characteristics
Compact	Urban or space-constrained projects	Limited circulation, tight stacking, essential operations only.
Optimised	Medium-scale projects with steady IBS output	Balanced flow; clear separation of casting, curing, and storage zones.
Large-Scale	High-volume or long-term projects (e.g., housing, township development)	Multi-bay casting zones, designated trailer routes, and potential for expansion.

3.1.2 Functional Layout and Equipment Requirements

A well-organised functional layout is essential for the efficient and safe operation of a temporary precast concrete casting yard. The layout should clearly define each working zone and ensure proper circulation from material entry to product delivery. Each zone should be equipped with suitable machinery, tools, and facilities to support daily operations and meet quality and safety standards.

The circulation route—whether for raw materials, workers, or storage for finished precast concrete products—should be planned to ensure smooth circulation, efficient material handling, and safe workflow between zones.

The selection and placement of equipment should consider the scale of production, available space, and compliance with regulatory requirements. In particular, heavy lifting equipment and mechanical tools should be registered with JKKP (DOSH) and operated exclusively by certified personnel. For most temporary precast concrete casting yards, power is supplied via generator sets. However, a temporary power supply connection may be used where feasible and approved by the utility provider.

Table 6 below outlines the key functional zones, their primary roles, and the minimum equipment or facilities required for operation, based on lessons learned from real case studies.

Table 6. Functional zones and equipment for a temporary precast concrete casting yard.

Zone / Facility	Purpose / Function	Minimum Equipment or Facility
Receiving Area	Delivery and unloading of production materials	Accessible drop zone, lifting equipment, storage area
Reinforcement Bending & Cutting Yard	Cutting and bending of reinforcement bars	Rebar cutter, bender, power supply
Casting Beds / Moulds	Shaping of precast concrete products (e.g., beams, panels, columns, etc.)	Steel mould, vibrating tables / tools, and a flat surface
Batching Plant (optional)	Consistent concrete mix	Batching plant (Shall comply with CIS 21 and BOMBA regulations)
Curing Area	Controlled curing to gain strength	Bunded wet curing space, plastic sheets / canvas, water source
Tools and Equipment	In-coming, in-process and finished product inspection	Measuring tape, calliper, etc.
Storage Areas	Storage of raw materials and precast concrete products	Open yard with spacers, stacking frames, and a cover for reinforcement bar
Loading Area	Transfer of finished products to the trailer	Trailer access, crane bay
Lifting Equipment / Registered Machine	Lifting and handling throughout the yard	Certified lifting equipment (hook, sling, spreader beam, etc), JKKP-compliant machine and operators
Worker Shelters and Toilets	Welfare amenities	Toilets, handwashing facilities, and a shaded rest area
Operation Office	Site management and coordination	Portable cabin, fire extinguisher, first aid kit, secure document cabinet
Internal Transport	Intra-yard logistics	Forklifts, lorries, material trollies
Water and Power Supply	Water and electricity for operations	Potable water, generator sets or utility provider
Perimeter Hoarding, Lighting and Security	Overall site safety and protection	Hoarding, compound lighting, security access, CCTV (optional)

Note: Practical examples of temporary precast concrete casting yard layouts, based on real projects, are provided in **Annexe C** for reference.

3.1.3 Production Flow and Material Handling

The production workflow typically involves stages from reinforcement preparation, mould setup, casting, curing, and demoulding, to storage and final delivery, as illustrated in **Figure 6** below:

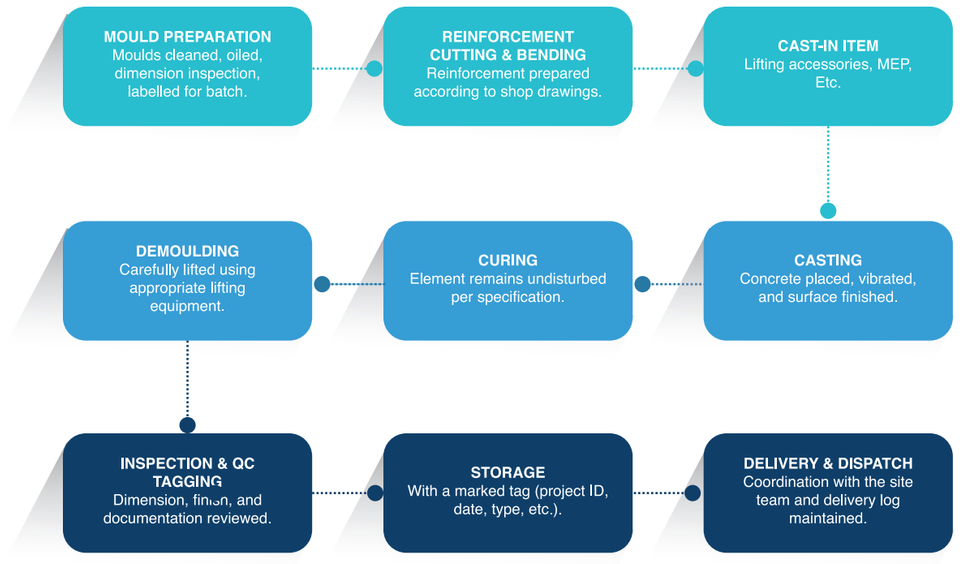


Figure 6. Typical production workflow for precast concrete products.

3.2 Safety, Site Welfare, and Operational Practices

Ensuring a safe, secure, and well-managed environment is crucial for the operation of a temporary precast concrete casting yard. All operations should comply with the Occupational Safety and Health Act 1994 (OSHA), CIDB's construction site safety protocols, and the requirements of the relevant local authorities. Implementing consistent operational practices will support quality assurance, productivity, and regulatory compliance.

3.2.1 Safety Site Requirements

All personnel, equipment, and operational areas should meet minimum safety standards. **Table 7** summarises key safety aspects for temporary precast concrete casting yard operations:

Table 7. Key safety aspects for temporary precast concrete casting yard operations.

Aspect	Minimum Requirement
Personal Protective Equipment (PPE)	Safety helmet, safety boots, reflective vest, safety gloves, eye protection, and hearing protection
Toolbox Briefing	Conduct frequent safety toolbox briefings
Machinery Guarding	Emergency stop switches, warning signs
Emergency Facilities	Fire extinguishers, spill kits, first aid and an evacuation plan
Hoarding and Access Control (if applicable)	24-hour guard or controlled gate entry
Pest Control	Regular housekeeping and pest control measures (e.g., fogging)
Lighting and Drainage	Adequate for night work and water runoff control
Signage	Directional, hazard, and safety procedure signs at each zone
Noise Risk Assessment	Conduct noise risk assessment for initial and during operation
Chemical Health Risk Assessment	Compulsory assessment of any chemicals that are hazardous to health
Certificate of Fitness	Valid *Perakuan Mesin Angkat* dan *Tekanan*

3.2.2 Good Industry Practices for Operations

Operational discipline contributes directly to safety, quality, and efficiency. The following are recommended for effective temporary precast concrete casting yard management:

1. **Appoint a Casting Yard Leader (whoever named):** A trained person should be designated to oversee daily operations, enforce safety, schedule production, and coordinate compliance.
2. **Maintain a Daily Logbook:** Record all activities systematically, including material arrival, precast concrete production, cube tests, weather conditions, and dispatches.
3. **Use a QAQC Tagging System:** Implement colour-coded or digital labelling to trace product status—e.g., "casted", "curing", "ready for inspection", or "approved for delivery".
4. **Conduct Safety Audits**: Periodic site walkthroughs and reviews should be conducted to check equipment condition, worker PPE compliance, and housekeeping standards.
5. **Internal Pre-Delivery Inspections:** Before dispatching precast concrete products, internal checks should be conducted to verify dimensional accuracy, surface finish, and label markings.
6. **Site Cleanliness and Material Handling:** Maintain an organised yard with designated material paths, bunded waste areas, and scheduled housekeeping routines.

3.3 Quality Assurance and Quality Control (QAQC)

Effective quality assurance ensures that all precast concrete products produced in a temporary precast concrete casting yard comply with design specifications, safety requirements, and product standards / technical specifications. To achieve this consistency, a structured, documented system is required that guides operators in maintaining quality throughout all stages of production.

A structured Production Quality Plan (PQP) document should therefore focus on receiving materials, process controls, and internal testing controls. Operational discipline and safety practices outlined in **Section 3.2.2** complement this PQP.

The PQP for each production process should be established by a temporary precast concrete casting yard operator and accepted by the CB. This section outlines recommended QAQC practices and documentation systems.

3.3.1 Recommended Production Quality Plan (PQP) Practices

Each temporary precast concrete casting yard should implement a structured PQP tailored to project specifications and precast concrete products. The PQP should cover:

1. **In-coming material control** – Reinforcement, water, cast-in items, if applicable (cement, aggregates, admixtures), etc.
2. **In-process control** – Casting sequence, compaction, curing, slump test, cube test.
3. **Finished product** – Appearance, dimensional (within tolerance), marking / tagging.
4. **Non-conformance product management** – Rework / repair, corrective and preventive actions.
5. **Complaint management** – Complaint and feedback handling.
6. **Calibration** – Testing and measuring equipment should be validated / calibrated.
7. **Document control** – Logs, test reports, checklists, approvals, etc.

All materials listed under the **Fourth Schedule of the CIDB Act 520** shall have a valid **PPS** before use.

3.3.2 Good Industry Practices for QAQC Documentation and Reporting

To ensure complete traceability and accountability, each casting yard should keep the following documents. The following are recommended for a standard set of documentation and reports that cover the precast concrete products listed in **Table 8** below.

Table 8. Typical documentation and reporting system.

Document	Purpose
Daily Casting Log	Record daily production details, concrete batches, and crew activity.
Delivery Log	Track shipments and deliveries of precast concrete products.
Concrete Test Report	Document concrete cube tests, slump, and other quality tests.
Material Receiving Form	Verify receipt and compliance of raw materials.
Precast Concrete Product ID Tag List	Track product details from casting to installation.
NCR Register	Track non-conformance events, corrective actions, and closures.
QAQC Checklist (per casting)	Confirm adherence to process and standards during production.

Note: Records should be maintained in both hard copy and digital formats, where possible. It is recommended that documentation be retained for at least five (5) years, or longer if required by authorities, depending on project type and regulatory obligations. For the sample form and checklist, refer to **Annexe B**.

3.4 Internal Logistics, Storage and Preparation for Delivery

Efficient logistics and storage practices are crucial for maintaining production continuity, ensuring safety, and preserving product quality. This section outlines the best practices for handling, storing, and transporting precast concrete products produced in a temporary precast concrete casting yard.

3.4.1 Internal Logistics and Handling

The layout of the temporary precast concrete casting yard should facilitate seamless internal logistics of raw materials, formwork, and finished precast concrete products. Internal logistics planning should address the elements listed in **Table 9.**

Table 9. Internal logistics elements and requirements.

Element	Minimum Requirement
Access Roads	Provide safe and accessible roads with sufficient width for the manoeuvring of machinery and vehicles.
Movement Flow	Provide one-way circulation (where possible) to reduce crossing hazards.
Material Transfer Zones	Keep marked and free from obstruction.
Speed Limit	Enforce speed limits within the yard through clear signage.
Signallers / Flagmen	Deploy at all loading / unloading zones, as well as in heavy-traffic areas.

3.4.2 Storage of Finished Precast Products

Finished precast concrete products should be stored securely to preserve their integrity, ensure traceability, and facilitate timely delivery. **Table 10** outlines the minimum requirements based on the previous case study.

Table 10. Minimum storage requirements.

Storage Guidelines	Minimum Requirement
Foundation	Levelled, compacted ground.
Stacking	The stacking method depends on the type of product.
Labelling	All units should be tagged with product ID, casting date, project ID and PC number.
Separation by Type	Different precast products (walls, slabs, beams, etc) are stored in clearly designated areas.
Access Space	Maintain acceptable clearance between rows for inspection and lifting.
Protection	If applicable, cover sensitive precast products (e.g., finished surfaces, glass) with suitable protective coverings.

Note: Refer to **CIS 9** for detailed guidance on handling, transportation, stacking, and installation of precast concrete components.

3.4.3 Preparation for Delivery

Proper planning, documentation and coordination with the site team should be carried out accordingly. **Table 11** specifies the minimum criteria for the pre-delivery checklist.

Table 11. Minimum criteria for pre-delivery preparation.

Pre-Delivery Checklist	Minimum Criteria
Visual Inspection	To check for any defects or damage.
Tag Verification	To ensure the tag matches the delivery order and schedule.
Delivery Note Issuance	To include precast concrete products list, ID, weight (if needed), driver's signature and contact number (recommended for traceability) and vehicle registration number.

3.4.4 Material Storage Method

Incoming materials, such as reinforcement, cement, and admixtures, should be received, inspected, and stored correctly. **Table 12** provides a recommended method for receiving and storing these materials.

Table 12. Material storage method.

Material	Recommended Methods
Reinforcement	Stored on racks or stands above ground and covered.
Cement	Stored in a dry and covered area.
Aggregates	Stored in bins or bays, separated by type.
Admixtures & Chemicals	Stored in lockable containers, clearly labelled with safety data sheets.
Cast-in items	Stored on racks or stands above ground.

3.5 Environmental Management

Effective environmental management is an important requirement for operating a temporary precast concrete casting yard. Beyond protecting the workforce, environmental management ensures that the temporary precast concrete casting yard operates in a manner that preserves the environment, complies with legal obligations, and reduces health and safety risks to all stakeholders.

All activities should align with current legislation and regulatory standards. Operators are responsible for ensuring compliance throughout the site's lifecycle—from planning and setup to demobilisation.

For off-site temporary precast concrete casting yards located outside the main project boundary, operators must assess whether the activities trigger requirements under the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015. Suppose an Environmental Impact Assessment (EIA) is required. In that case, the temporary precast concrete casting yard must fully comply with EIA provisions and **apply the EIA requirements** in place of the general guidance provided in this **Section 3.5**.

The project/ temporary precast concrete casting yard owner is responsible for monitoring and overseeing environmental performance, particularly by controlling noise, vibration, air emissions, and water discharge.

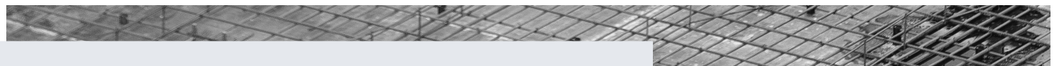
3.5.1 Environmental Management and Pollution Control

Operators should adopt environmental control measures to minimise site impact, protect nearby communities, and meet compliance obligations. **Table 13** below outlines recommended practices in line with DOE regulations. Best practice is to comply with ISO 14001: Environmental Management Systems – Requirements with Guidance for Use.

Table 13. Environmental control measures for a temporary precast concrete casting yard.

Aspect	Recommended Control Measures	Applicable Reference
Water Runoff	• Install perimeter drains, sediment traps, and silt fences to prevent contaminated runoff from entering watercourses or storm drains. • Maintain drainage channels regularly to avoid blockages. • Ensure all discharge complies with allowable limits set by authorities.	• Manual Saliran Mesra Alam (MSMA), 2nd Edition, JPS (2012) • Uniform Building By-Laws (UBBL) 1984 – Drainage Provisions, PBT
Dust Suppression	• Use water spray systems to control airborne dust. • Store aggregates in covered areas. • Avoid open-air concrete mixing activities.	• Environmental Quality (Clean Air) Regulations 2014, DOE
Air Pollution	• Prohibit open burning within or near the casting yard. • Maintain machinery to prevent excessive smoke emissions. • Ensure compliance with permitted air emission limits.	• Environmental Quality (Clean Air) Regulations 2014, DOE
Chemical Handling	• Store admixtures, fuel, and lubricants in bunded areas with spill containment. • Display proper signage and Safety Data Sheets (SDS) at chemical storage zones. • Train workers in chemical handling and emergency procedures.	• Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH) regulation 2000, JKKP
Noise Pollution	• Use a noise barrier to control and limit noisy operations within approved working hours. • Locate noisy activities away from site boundaries and sensitive zones.	• Environmental Quality (Motor Vehicle Noise) Regulations 1987, DOE
Construction Waste	• Provide bins for concrete waste, reinforcement offcuts, formwork scrap, and domestic waste. • Implement systematic waste segregation.	• CIDB Guidelines on Construction Waste Management, CIDB
Scheduled Waste	• Hazardous waste (e.g., oil, chemical containers) shall be sealed, labelled, and recorded per DOE guidelines. • Arrange licenced disposal.	• Environmental Quality (Scheduled Wastes) Regulations 2005, DOE

Note: This reference is not limited to the provisions listed; any by-laws or circulars issued by the local authority and other relevant agencies must also be complied with.



Demobilisation for Handover

10 Demobilisation for Handover

Upon completion of production, a structured demobilisation process should be implemented to ensure environmental compliance, maintain safety, and fulfil all landowner or authority requirements.

This phase includes dismantling equipment, clearing waste, restoring the site, and submitting final documentation for handover to the landowner or authority (if applicable). **Table 14** outlines the recommended demobilisation steps.

Table 14. Recommended steps for demobilisation.

Step	Key Activities
Inventory and Asset Management	- Record remaining precast concrete products, materials, and equipment. - Identify items suitable for reuse, recycling, or safe disposal in accordance with regulations.
Dismantling and Equipment Removal	- Dismantle cranes, batching plants (if applicable), moulds, sheds, and other temporary structures safely. - Engage competent personnel and proper lifting/ transport methods.
Site Clearance	- Clear debris, reinforcement offcuts, unused materials, and chemicals. - Segregate and dispose of waste according to DOE guidelines.
Utility Disconnection and Safety Compliance	- Disconnect power, water, and utilities safely by qualified personnel. - Remove temporary hoarding (if applicable), lighting, and security posts (if applicable).
Final Documentation and Handover	- Record demobilisation report with photos. - Notify the landowner of site inspection and final clearance. - Notify the utility authority of disconnection. - Notify the CB for termination of PC, where applicable. - Notify the PBT of site closure. - Surrender the ML, where applicable.

Note: All disconnection and dismantling works should be supervised by qualified personnel. A safety briefing should be conducted before demobilisation begins. For best practices, refer to MS 2318: Code of Practice for Demolition of Buildings and BS 6187: Code of Practice for Demolition.

Annexe

Annexe

ANNEXE A:
CERTIFICATION REQUIREMENTS

A.1 Product Certification (PC)

Product Certification is the first step in ensuring that precast concrete products meet recognised standards before being used in construction works. A valid PC issued by an accredited Certification Body (CB) forms the foundation for subsequent approvals, including the PPS. The table below outlines the minimum requirements that applicants must prepare and submit to support their PC application. Applicants are advised to ensure their documentation is complete to avoid delays in the certification process.

Category	Recommended Requirement
Company & Facility Information	• Valid CIDB registration (Contractor / Manufacturer) • Company profile (name, registration no., address, contacts) • Manufacturing facility details (permanent or temporary casting yard) • Manufacturing Licence by MIDA or Confirmation of Exemption (if applicable)
Product Information	• Product description and intended use (structural / non-structural) • Technical drawings and specifications (dimensions, tolerances, material grade) • Reference standards (e.g., BS EN 13369, CIS 24, CIS 9, CIS 21)
Material Compliance	• Material test certificates (cement, aggregates, reinforcement, admixtures, cast-in items) • Evidence of compliance with valid PPS for materials listed in the Fourth Schedule of Act 520
Testing Report	• Testing reports shall be issued by an accredited Testing Body (TB) in compliance with ISO/IEC 17025. • All reports must conform to the relevant clauses of the applicable standards.
Quality Assurance & Control (QAQC)	• PQP covering material control, in-process control, and finished product checks • Non-conformance management procedures • Calibration records for testing / measuring equipment
Workforce & Competency	• List of competent staff and operators • Evidence of valid CIDB Green Cards and SKKP certification for all relevant personnel
Previous Approvals (if any)	• Copies of previous PC, PPS, or related approvals for similar products (if available)
Application Documentation	• Completed CB application form • Supporting documents in hardcopy and softcopy (PDF, CAD drawings where applicable) • Product marking sample

Note: The requirements listed above represent the minimum reference requirements. Certification Bodies (CBs) may impose additional or alternative requirements depending on the product type and scope. Applicants are strongly advised to consult the relevant CB to confirm the detailed submission requirements before submitting their application.

A.2 Perakuan Pematuhan Standard (PPS)

The PPS is a mandatory requirement under Act 520 for all IBS precast products used in construction projects. It will only be issued once compliance with both PC and CIS 24 requirements has been demonstrated. A valid PPS confirms that the product conforms to national standards and is approved for use in government and private projects subject to IBS compliance. The table below lists the documents required when submitting a PPS application to CIDB.

Document	Mandatory Requirement
Product Certification (PC) Certificate	A valid Product Certification issued and endorsed by a Certification Body approved by CIDB.
Application Fee Receipt	Copy of payment receipt for the PPS application.
Company Registration Certificate	Certified true copy of the company registration from the Companies Commission of Malaysia (SSM).
Other Relevant Documents	Any additional documents as required by CIDB or specified in the official application form.

A.3 Manufacturing Licence (ML) *(If Applicable)*

For companies intending to operate a precast concrete casting yard on a long-term basis or to convert it into a permanent facility, an ML from the Malaysian Investment Development Authority (MIDA) is required under the Industrial Coordination Act 1975.

An ML is required if the company meets either of the following thresholds:

a) Shareholders' funds of RM2.5 million and above, or
b) Employment of 75 or more full-time paid employees.

Additionally, applicants must meet the eligibility criteria outlined in next table.

Criterion	Minimum Requirement
Capital Investment per Employee (CIPE)	At least RM140,000
Workforce Composition	At least 80% Malaysian employees
Managerial, Technical and Supervisory (MTS) Index	Minimum 25%
Product Value-Added	Minimum 40%

Companies with shareholders' funds below RM2.5 million and employing fewer than 75 full-time paid employees are exempted from the requirement to obtain a Manufacturing Licence. Instead, they may apply to MIDA for a Confirmation Letter as proof of exemption. Exempted companies remain eligible to apply for various facilities, including:

a) Import duty exemptions for machinery, equipment, and raw materials (Customs Duties Exemption Order 2017).
b) Sales tax exemptions (Sales Tax Exemption Order 2018).
c) Investment incentives under the Promotion of Investments Act 1986 and the Income Tax Act 1967, subject to fulfilling the relevant conditions.

Upon the cessation of operations or demobilisation of the casting yard, companies holding a Manufacturing Licence are required to notify MIDA and surrender the ML in accordance with the procedures established by the authority.

For any further information, please refer to MIDA for clarification.

ANNEXE B:
SAMPLE FORMS AND CHECKLIST
(Operational Forms and Quality Checklists)

The sample forms provided in this annexe are for reference only. Companies may adapt or digitalise them according to internal systems, provided that the minimum documentation requirements are met.

B.1 Daily Casting Log Sheet

Date	Time	Product ID	Mould No.	Concrete Grade	Volume (m^3)	Slump (mm)	Concrete DO No.	Remarks

B.2 Delivery Log Form

Client Name:

Project Name:

Date	DO No.	Product ID	Vehicle Registration No.	Site	Time Out	Receiver Name	Signature

B.3 QAQC Checklist (Finished Product)

Product ID:

Date of casting:

Item	Criteria Met (✓/✗)	Remarks
Visual Inspection and Surface Finish		
Dimensions Within Tolerance		
Lifting Hook Placement		
Tag / Label Present		

Checked by:

Date:

B.4 NCR Form (Non-Conformance Report)

Date	:	
Product / Batch ID	:	
Issue Identified	:	
Corrective Action Taken	:	
Preventive Action Implemented	:	
Verified By	:	
Status	:	[Open / Closed]
Supporting Photo	:	[Attach]

ANNEXE C:
EXAMPLE OF A TYPICAL TEMPORARY PRECAST CONCRETE CASTING YARD

EXAMPLE TEMPORARY PRECAST CONCRETE CASTING YARD 1:	
Project location	Perumahan Iskandar Puteri Bangsa Johor, Mukim Tanjung Kupang, Daerah Johor Bahru, 815550, Gelang Patah, Johor
Temporary precast concrete casting yard location	Site for Sekolah Bersepadu (PTD 9406), Gelang Patah, Johor
Manufacturer	Kimlun Sdn Bhd
Project type	Housing Development – State Government
Temporary precast concrete casting yard category	On-site
Area occupied	40,576 m2
Precast product produced	i. Wall panel ii. Beam iii. Column iv. Slab (tray) v. Letter box and compartment bin

Temporary precast concrete casting yard layout:

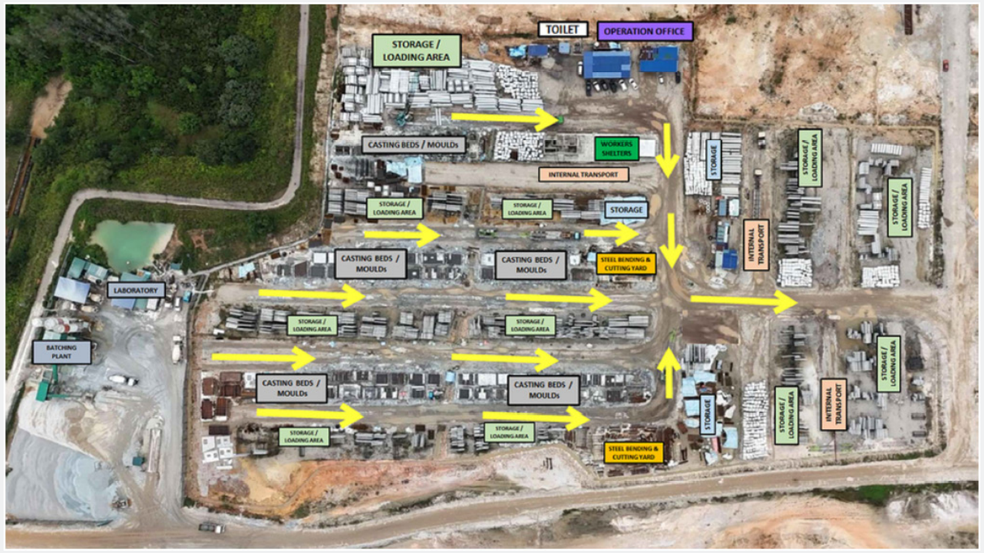


Photo Courtesy: Kimlun Sdn Bhd

EXAMPLE TEMPORARY PRECAST CONCRETE CASTING YARD 2:

Project location	Markas Angkatan Bersama Sungai Panching Kuantan, Pahang
Temporary precast concrete casting yard location	Pejabat Tapak RKAT Sungai Panching Kuantan, Pahang
Manufacturer	Islah Mega (Sarawak) Sdn Bhd
Project type	Housing (quarters) – Federal Government
Temporary precast concrete casting yard category	On-site
Area occupied	2,723 m^2
Precast product produced	i. Wall panel ii. Beam iii. Slab

Temporary precast concrete casting yard layout:

Photo Courtesy: Islah Mega (Sarawak) Sdn Bhd

EXAMPLE TEMPORARY PRECAST CONCRETE CASTING YARD 3:

Project location	Alamesra, Off Sulaman Coastal Highway, Kota Kinabalu, Sabah
Temporary precast concrete casting yard location	Alamesra, Off Sulaman Coastal Highway, Kota Kinabalu, Sabah
Manufacturer	KTI Sdn Bhd
Project type	Housing Development - Private
Temporary precast concrete casting yard category	Off-site (adjacent)
Area occupied	20,234 m^2
Precast product produced	i. Wall panel ii. Beam iii. Column iv. Slab v. Staircase Units

Temporary precast concrete casting yard layout:

Photo Courtesy: KTI Sdn Bhd

EXAMPLE TEMPORARY PRECAST CONCRETE CASTING YARD 4:	
Project location	Kem Lok Kawi ,89500, Kota Kinabalu, Sabah, Malaysia
Temporary precast concrete casting yard location	Taman La Gloxnia, Kinarut 89600 Papar Sabah, Malaysia
Manufacturer	KTI Sdn Bhd
Project type	Housing (quarters) – Federal Government
Temporary precast concrete casting yard category	Off-site
Area occupied	36,421 m^2
Precast product produced	i. Beam ii. Column iii. Slab iv. Staircase Units
Temporary precast concrete casting yard layout:	

Photo Courtesy: KTI Sdn Bhd

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Glossary

The glossary provided is intended solely for use within this guideline. The definitions in this document are context-specific and may not be applicable or relevant to other references or standards.

Term	Description
Admixture	Material other than water, aggregate, or hydraulic cement, used as an ingredient of concrete and added to concrete before or during its mixing to modify its properties.
Audit	Independent examination of a work product or set of work products to assess compliance with specifications, standards, contractual agreements, or other criteria
CB	An agency accredited as a product certification body by Standards Malaysia and compliant with ISO/IEC 17065 and registered with CIDB.
IB	An agency accredited as a product inspection body by Standards Malaysia and compliant with ISO/IEC 17020 and registered with CIDB.
TB	An agency accredited as a laboratory by Standards Malaysia and compliant with ISO/IEC 17025 and registered with CIDB.
CIS 9	CIDB's Construction Industry Standard for handling, transportation, stacking and installation of precast concrete products
CIS 21	CIDB's Construction Industry Standard for ready-mixed concrete production and delivery compliance.
CIS 24	CIDB's Construction Industry Standard for IBS manufacturer certification, covering factory operations, QAQC, safety, and sustainability.
Concrete	Material formed by mixing cement, coarse and fine aggregate, and water, with or without the incorporation of admixture, additions of fibres, which develop its properties by hydration
Tag	A label for identification and traceability.
Curing	The process of maintaining the moisture and temperature of concrete to allow proper strength development.
Demobilisation	The process of dismantling the temporary working area.
Environmental Control Measures	Practices used to minimise air, water, soil, and noise pollution from construction activities.
IBS Score	The score for computing the total IBS usage in a building project.
Inspection	A quality or safety check performed before, during or after production.
Material Receiving	The process of inspecting and documenting incoming materials delivered to the site for conformance.
NCR	A document used to record and address deviations from specifications, procedures, or standards.
Zone	A defined area within the temporary precast concrete casting yard assigned for specific tasks, such as casting, curing, or loading.
PC	An assessment was conducted on the precast concrete products and their facilities to ensure conformity with the standard requirements.
PK1.10	A Treasury circular mandating the use of IBS in government projects
PPE	Items used to protect construction workers.
PPS	A mandatory certificate issued by CIDB confirming that a product complies with relevant standards under Act 520.
Producer	Person or body producing fresh concrete.
Precast Concrete Product	A product which is made of concrete and is manufactured in accordance with a specific product standard (e.g. wall, beam, column, slab, staircase, etc.)
QAQC	Method to ensure and verify that construction products meet specified standards.
Regulatory Compliance	Adherence to legal and technical standards set by the government and local authorities.
Site Clearance	The activity of removing debris, waste, and equipment to prepare the site for demobilisation and handover.
Skilled Worker (Schedule 3)	A construction personnel category recognised by CIDB under Act 520, typically certified in specific trades.
Slump Test	A field test that measures the workability of fresh concrete.
Spill Kit	A prepared set of tools and absorbents for containing and cleaning up chemical or fuel spills.
Storage Area	A designated zone in the temporary precast concrete casting yard for keeping raw materials or finished products safely and in order.
Temporary Precast Concrete Casting Yard	A non-permanent facility established on-site or near construction sites to manufacture precast concrete components such as beams, panels, columns, slabs, and other elements. These yards enable faster and safer delivery of IBS components by reducing transportation distance, lowering logistics costs, and supporting timely project completion.

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CIDB Malaysia looks forward to continued partnership with all stakeholders as we advance safer, more efficient, and sustainable IBS practices nationwide.

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