FORM CIDB IBS SCORE M1/2023

~~REV01~~

CIDB MALAYSIA

PROJECT INFORMATION AND IBS SCORE DECLARATION

For Office Use
Project Registration No: Project Category:

Project Name:	Contract Value:
Contractor Name:	Architecture Consultant Name:
Developer/ Owner Name:	Civil/ Structure Consultant Name:

List of Submitted Drawings *[Please tick (/)]*

1) Project Plan Drawing [ ]
2) Structural Drawings (including beam and column schedules) [ ]
3) Architectural Drawings (including door and window schedules) [ ]
4) Section Plan [ ]
5) Roof Plan [ ]

We hereby declare that the information given and the IBS Score submitted herewith is true and complete.

The total **IBS Score** for the proposed project/ building is _____

Name & Signature of Qualified Person:

_____

Designation :

Professional Reg. No :

Date :

CIDB MALAYSIA

SUMMARY IBS SCORE CALCULATION FOR PROJECT/ BUILDING

PROJECT DETAILS
Project/ Building Name:
Category of Project/ Building *[Please tick (/), multiple ticks for mixed development]* ☐ Residential (landed) ☐ Industrial ☐ Commercial ☐ Residential (high-rise) ☐ Institutional ☐ Others _____

SUMMARY SHEET (GROUP OF BUILDING/ BLOCK)				
BUILDING/ BLOCK NAME	**AREA (m^2)**	**COVERAGE AREA (%)**	**IBS SCORE BUILDING/ BLOCK**	**IBS SCORE OF PROJECT**
TOTAL				

TOTAL IBS SCORE FOR THIS PROJECT =

IBS SCORE CALCULATION FOR BUILDING/ BLOCK

BUILDING/ BLOCK DETAILS
Building/ Block Name:
Category of Building/ Block *[Please tick (/)]* ☐ Residential (landed) ☐ Industrial ☐ Commercial ☐ Residential (high-rise) ☐ Institutional ☐ Others _____

SUMMARY IBS SCORE CALCULATION					
BUILDING/ BLOCK NO.	**NO OF BLOCKS/ UNITS**	**STRUCTURAL SYSTEMS (50 SCORE)**	**WALL SYSTEMS (20 SCORE)**	**OTHER SIMPLIFIED CONSTRUCTION SOLUTION (30 SCORE)**	**TOTAL IBS SCORE**

NOTE:

1. Additional factors for system used based on component utilisation. The components are as follows:
   a) Beam and column – numbers
   b) Wall – metre length
   c) Slab – metre square

System used	Usage in Percentage	Additional Factors
i. Precut and prebend reinforcement bar/ steel fabric	50% ≤ x < 75%	0.02
	75% ≤ x ≤ 100%	0.05
ii. Prefabricated reinforcement cage	50% ≤ x < 75%	0.05
	75% ≤ x ≤ 100%	0.10
iii. Self-compacting concrete	50% ≤ x < 75%	0.05
	75% ≤ x ≤ 100%	0.10
iv. Tunnel formwork / self-climbing formwork system	50% ≤ x < 75%	0.10

CALCULATION IBS SCORE FOR PART 1: STRUCTURAL SYSTEMS

CONSTRUCTION METHOD					
No.	**COLUMNS & BEAMS / WALLS**	**IBS Factor, (a)**	**Area(m^2)/ utilisation(%), (b)**	**Coverage, (d) = (b)/(c)**	**IBS Score, (a)x(d)x50**
A. SLABS/ FLOORING SYSTEM: Prefabricated slabs/ flooring system					
1.	**Prefabricated columns and beams/ load-bearing walls**	1.0			
2.	**Prefabricated columns and in situ beams using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
3.	**Prefabricated columns and in situ beams using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
4.	**Prefabricated beams and in situ columns using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
5.	**Prefabricated beams and in situ columns using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
6.	**In situ columns and beams / load-bearing walls using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.5			
7.	**In situ columns and beams / load-bearing walls using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.4			
8.	**Load-bearing blockwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
9.	**In situ columns and beams / load-bearing walls with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			

CONSTRUCTION METHOD					
No.	COLUMNS & BEAMS / WALLS	IBS Factor, (a)	Area(m^2)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x50
B. SLABS/ FLOORING SYSTEM: In situ concrete on permanent formwork					
1.	**Prefabricated columns and beams/ load-bearing walls**	0.8			
2.	**Prefabricated columns and in situ beams using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
3.	**Prefabricated columns and in situ beams using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.5			
4.	**Prefabricated beams and in situ columns using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
5.	**Prefabricated beams and in situ columns using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.5			
6.	**In situ columns and beams / load-bearing walls using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.4			
7.	**In situ columns and beams / load-bearing walls using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
8.	**Load-bearing blockwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
9.	**In situ columns and beams / load-bearing walls with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.5			

CONSTRUCTION METHOD					
No.	COLUMNS & BEAMS / WALLS	IBS Factor, (a)	Area(m^2)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x50
C. SLABS/ FLOORING SYSTEM: In situ concrete using reusable formwork system					
1.	**Prefabricated columns and beams/ load-bearing walls**	0.7			
2.	**Prefabricated columns and in situ beams using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.4			
3.	**Prefabricated columns and in situ beams using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
4.	**Prefabricated beams and in situ columns using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.4			
5.	**Prefabricated beams and in situ columns using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
6.	**In situ columns and beams / load-bearing walls using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
7.	**In situ columns and beams / load-bearing walls using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.1			
8.	**Load-bearing blockwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.4			
9.	**In situ columns and beams / load-bearing walls with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			

CONSTRUCTION METHOD					
No.	COLUMNS & BEAMS / WALLS	IBS Factor, (a)	Area(m^2)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x50
D. SLABS/ FLOORING SYSTEM: In situ concrete using conventional timber formwork					
1.	**Prefabricated columns and beams/ load-bearing walls**	0.4			
2.	**Prefabricated columns and in situ beams using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
3.	**Prefabricated columns and in situ beams using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.2			
4.	**Prefabricated beams and in situ columns using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
5.	**Prefabricated beams and in situ columns using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.2			
6.	**In situ columns and beams / load-bearing walls using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.1			
7.	**In situ columns and beams / load-bearing walls using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.0			
8.	**Load-bearing blockwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
9.	**In situ columns and beams / load-bearing walls with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.2			

CONSTRUCTION METHOD					
No.	COLUMNS & BEAMS / WALLS	IBS Factor, (a)	Area(m^2)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x50
E. SLABS/ FLOORING SYSTEM: Void					
1.	**Prefabricated columns and beams/ load-bearing walls**	1.0			
2.	**Prefabricated columns and in situ beams using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
3.	**Prefabricated columns and in situ beams using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
4.	**Prefabricated beams and in situ columns using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
5.	**Prefabricated beams and in situ columns using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
6.	**In situ columns and beams / load-bearing walls using reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.5			
7.	**In situ columns and beams / load-bearing walls using conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.0			
8.	**Load-bearing blockwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.7			
9.	**In situ columns and beams / load-bearing walls with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			

CONSTRUCTION METHOD				
No. ROOF SYSTEMS	IBS Factor, (a)	Area(m^2)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x50
1. Prefabricated roof trusses	1.0			
2. Conventional timber roof trusses	0.0			
Total Area, (c) =				
Total Coverage = 1.00				
Total IBS Score =				

Maximum IBS Score for Part 1 = 50	Total IBS Score (Part 1) =

CALCULATION IBS SCORE FOR PART 2: WALL SYSTEMS

No.	WALL SYSTEMS	IBS Factor, (a)	Length(m)/ utilisation(%), (b)	Coverage, (d) = (b)/(c)	IBS Score, (a)x(d)x20
1.	**Prefabricated wall panels**	1.0			
2.	**Dry wall system**	0.7			
3.	**In situ concrete with permanent formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.6			
4.	**Blockwork system**	0.5			
5.	**In situ concrete with a reusable formwork system** (additional factor if applicable: i / ii / iii / iv)[1]	0.3			
6.	**Common brick walls**	0.0			
7.	**In situ concrete with conventional timber formwork** (additional factor if applicable: i / ii / iii / iv)[1]	0.0			
			Total length, (c) =		
				Total Coverage = 1.00	
					Total IBS Score =

Maximum IBS Score for Part 2 = 20	**Total IBS Score (Part 2) =**

CALCULATION IBS SCORE FOR PART 3: OTHER SIMPLIFIED CONSTRUCTION SOLUTIONS

(A) DESCRIPTION		Unit	Usage (%)		% Usage	Points
			50% ≤ x <75%	75% ≤ x ≤ 100%		
1 Utilisation of Standardised Components						
a) Beam	*(Refer to Annex A, CIS 18:2023)*	Nos	2	4		
b) Column		Nos	2	4		
c) Wall		m	2	4		
d) Slab		m^2	2	4		
e) Door	*(Refer to MS1064-4)*	Nos	2	4		
f) Window	*(Refer to MS1064-5)*	Nos	2	4		

Total points calculated = _____

Maximum points for this subcategory = 16 points. **Points awarded (A) =**

(B) DESCRIPTION	Unit	Usage (%)		% Usage	Points
		50% ≤ x <75%	75% ≤ x ≤ 100%		
2 Repetition of the Structural Layouts					
a) For a building of three (3) storeys and above					
i. Repetition of floor-to-floor height	Nos	2	3		
ii. Vertical/ horizontal repetition of structural layout	Nos	2	3		
b) For a building of one (1) or two (2) storeys					
i. Horizontal repetition of structural layout	Nos	3	6		

Total points calculated = _____

Maximum points for this subcategory = 6 points. **Points awarded (B) =**

(C) DESCRIPTION	Unit/ Adopt	Usage (%)		% Usage	Points
		50% ≤ x <75%	75% ≤ x ≤ 100%		
3 Productivity Enhancing Solutions and Technology Adoption					
a) Simulation and Modelling					
i. Building Information Modelling (BIM)	Level 1	2			
	Level 2 and above	6			
b) Digitalisation and Virtualisation					
i. Augmented Reality & Virtualisation	Adopt	1			
ii. Artificial Intelligence	Adopt	1			
iii. Big Data and Predictive Analytics	Adopt	1			
iv. Blockchain	Adopt	1			
v. Cloud and Realtime Collaboration	Adopt	1			
vi. Internet of Things	Adopt	1			
c) Smart Construction					
i. 3D Printing & Additive Manufacturing	Adopt	1			
ii. 3D Scanning and Photogrammetry	Adopt	1			
iii. Autonomous Construction	Adopt	1			
iv. Advanced Building Material	Adopt	2			
v. Prefabrication & Modular Construction					
(a) Prefabricated Volumetric Module (PVM)	Nos	3	6		
(b) Prefabricated staircase	Nos	2	4		
(c) Usage of Prefabricated Mechanical, Electrical, Plumbing (MEP) systems	Nos	2	4		

Building/ Block No. :

(C) DESCRIPTION		Unit/ Adopt	Usage (%)		% Usage	Points
			50% ≤ x <75%	75% ≤ x ≤ 100%		
d)	**Other Enhancing Solutions**					
i.	Usage of self-climbing working platform	Adopt	2			
ii.	Usage of Modular Gridlines in drawings	Nos	3	6		

Total points calculated = _____

Maximum points for this subcategory = 14 points.	Points awarded (C) =

SUMMARY OF PART 3

No.	PART 3: SUBCATEGORY	Points	
		Maximum	Awarded
(A)	Utilisation of Standardised Components	16	
(B)	Repetition of the Structural Layouts	6	
(C)	Productivity Enhancing Solutions and Technology Adoption	14	

Total IBS Score calculated = _____

Maximum IBS Score for Part 3 = 30	Total IBS Score awarded (Part 3) =

Building/ Block No. :
Page No. : _____ of _____