

DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

THE DEGREE OF INDUSTRIALIZED BUILDING SYSTEMS IMPLEMENTATION FOR PROJECTS IN MALAYSIA

This academic project is submitted in partial fulfillment of the requirement for the Bachelor Of Building Surveying (Hons.)

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ABSTRACT

Industrialized Building Systems (IBS) is a construction process that utilizes components or building systems which involve prefabricated components and on-site installation. From the structural classification, there are five main IBS groups identified as being used popularly in Malaysia.

- Pre-cast Concrete Framing, Panel and Box Systems pre-cast columns, beams, slabs, 3-D components (balconies, staircases, toilets, etc), etc;
- Formwork Systems tunnel forms, EPS-based forms, beams and columns moldings forms, permanent steel formworks, etc;
- Steel Framing Systems steel beams and columns, portal frames, roof trusses, etc;
- Prefabricated Timber Framing Systems timber frames, roof trusses, etc;
- Block Work Systems interlocking concrete masonry units (CMU), lightweight concrete blocks, etc.

With the advancement of technology and innovation, various pre-fabricated materials have entered the market. It includes gypsum, wood wool, polymer, fiberglass, glass and aluminum-based IBS components. Currently a total of 128 IBS companies have registered with CIDB Malaysia. As mentioned, the use of IBS assures valuable advantages such as the reduction of unskilled workers, less wastage, less volume of site

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