Putra Blok

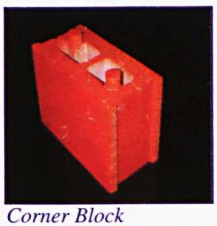
Interlocking Mortarless Load Bearing Building Block System

Any building system that is developed must satisfy normal building construction requirements i.e. to be structurally efficient, durable and environmental friendly. It must allow for rapid construction to meet time frames and cost set by stakeholders. In terms of practical requirements, the shape of the block must be as simple as possible to facilitate production and construction.

The Interlocking Hollow Blocks (PUTRA BLOK) have been used in the construction of non-load bearing as well as load bearing walls in recent years. The main idea of Interlocking Hollow Block System (IHBS) is the elimination of the mortar layers. The blocks are interconnected through the provision of protrusions and grooves. The elimination of mortar layers in the IHBS will speed up construction and reduce the number of skilled and unskilled workers required to construct an identical traditional mortar blocks.

Stretcher Block

As they are light with self-aligning features, the interlocking hollow blocks can be assembled much faster compared to the conventional mortar masonry construction. Moreover, the interconnection between the blocks has been designed to withstand the different stresses that develop in the wall due to the applied load.



Corner Block

Three different interlocking block units are developed to assemble a wall i.e. Stretcher and Corner block (300mm x 150mm x 200mm), and the Half block (150mm x 150mm x 200mm). The interlocking mechanism in any direction is ensured through providing a protrusion of 20mm height. In addition, the assembled blocks provide continuous hollow voids that can be used to host ties or stiffeners in vertical and horizontal directions (similar to lintels and beams).

Half Block

The Interlocking Hollow Load bearing Block Building System has been granted a U.K. patent in 2002 (GB2361254B), and a Malaysian patent (MY 115629A). The product won a Gold medal at the International Exhibition of Inventions in Geneva in April 2001 and the CIDB (Construction Industry Development Board - Malaysia) R&D award for 2002.

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