Putra Blok makes it cheaper

Lego – those colourful building blocks we used to play with as children – seems to be the inspiration behind our construction sector's latest innovation, Putra Blok.

Created by Universiti Putra Malaysia's (UPM) Housing Research Centre (HRC), its Associate Professor Dr Razali Abdul Kadir said with it, a whole new system that can make light work of constructing houses is now available.

"Putra Block is the first to use the interlocking, load-bearing hollow system in the country," he said.

"It is mortar-free masonry, meaning it is much lighter for manual handling. It is also sturdy and environment-friendly as it does not require formwork, so there'll be less debris at a worksite."

Moreover, Razali said it can lower construction costs and assembly time, as well as require fewer workers.

The secret behind Putra Blok, which is made from sand and cement – the same as plain bricks – lies in its design.

"The assembly process is fast and simple because of the self alignment feature which is similar to that of the Lego system," he explained.

There are three parts to the Putra Blok: The "stretcher", "corner" and "half-block".

"These three parts combine to produce a wall that is structurally strong. If a proper manufacturing standard is achieved, the components will integrate to give a structure finishing and aesthetic advantages as well," Razali said.

With the design completed, patented and endorsed by the Ministry of Housing and Local Government, the next step for Putra Blok is to make it commercially viable for mass production via research funding.

"There are obvious benefits from the system," Razali said, adding that it has already been used to construct a building in UPM's main campus in Serdang, Selangor, and three houses in Terengganu.

Just like cement bricks, Putra Blok

can also be used for partition walls. It won a gold medal at the International Exhibition of Inventions in Geneva in April 2001, the CIDB R&D Award in 2002, and silver medals at the British Invention Show in London and the International Exhibition on New Products in Nuremberg, Germany, both in 2004.

Besides being patented in Malaysia, it has also received patents in the United Kingdom and the United States. - by Zuhaila Sedek

For more information, surf to www. komersil@icc.upm.edu.my The assembly process is fast and simple because of the self alignment feature which is similar to that of the Lego system, says Razali.

