ARCHITECTONIC SPACERS

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The realization of faster and lesser workforce while advancing the local manufacturing capability for constructing industrialised buildings has been hampered by the restrictive form formulation so contradicting the natural architectural design process. During the first decade of introducing industrialised building systems—or IBS—many architects were disheartened when there were limited cache of available components in the supply market. Instead of encountering gratifying IBS design experience, architects became irritated when they were constituting the 3-D volumetric form of their architectural visions. Motivated by the need to industrialised timber construction for Malaysia, Ibrahim and Jaganathan utilised ethnography research methodology to study an expert during the design, prefabrication and assembly of a timber building. They established prefabrication and design links to construction quality performance and the need to include both downstream aspects during design of timber buildings. Their research led to discoveries on streamlining the architectural design process which integrates timber prefabrication and assembly requirements very early during design stage. Their invention is called the architectonic spacer building system. It differs from the dominant post-and-beam framing system yet improves the platform framing system in timber construction. Its ultimate benefit is realising architectural aesthetical form formulation. Varied predetermined shaped spacers would support the flexible components assembly in making pre-assembled and standardised industrialised buildings. This article recommends the architectonic spacer building system to hybrid with non-timber materials and refined it for environmentally sensitive sites. The artefact is inspired by the varied architectonic spacer forms which had been expended during the early prototype development.

3D timber model - 2015


NATURE'S YIELD AND
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