THE DOCTORAL RESEARCH ABSTRACTS

Volume: 4, Issue 4 Nov 2013

INSTITUTE of GRADUATE STUDIES
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IPSis Biannual Publication
The tensile, ballistic and puncture impact behavior of woven fabric have been subject of interests for many researchers. The tensile behavior of woven fabric can be analyzed from the experimental and analytical methodologies. While experiment provides accurate information about woven fabric’s mechanical properties than the analytical approach, it also generates sample wastage. Finite element analysis (FEA) method is used to model uniaxial tensile, impact and puncture response of woven fabrics in two and three dimensional geometrical model shapes. Woven fabrics models sizes are based on either unit cell or meso-scale (large scale) approach. Nevertheless, limited publications address woven fabric models in terms of definition, contractual procedure, procurement method and suitability of the project. It can be ascertained from the results; public clients described strategic partnering as a commitment and shared goals between stakeholders whilst private clients described it as a trust relationship between stakeholders. The majority of public and private clients in Malaysia are found to use PAM and PWD the standard form of contract during the strategic partnering exercise in IBS projects. In terms of procurement method, public clients mostly use design and build while private clients uses the traditional method in strategic partnering practice in the IBS projects. Both public and private clients indicated that mass construction, complexity of the projects and long term development of IBS projects are suitable to practice strategic partnering. However, for partnering charter, private clients were unfamiliar with this approach in the contractual practice in strategic partnering. Win-win situation received by public and private clients through practicing this approach, public clients revealed that they received social benefits and cost saving as compared to private clients where they gained in terms of return on investment and profit. One of the outcome of this research is a conceptual framework developed which is suitable as a reference for the Malaysian construction industry players practicing strategic partnering in IBS construction approach. Its guide the industry player’s towards a better understanding and successful implementation of strategic partnering as planned in the Construction Industry Master Plan Malaysia 2006-2015 (CIMP).

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