

Pushover Experiment of Traditional Dieh-Dou Timber Frame

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Abstract : In this paper, in order to investigate the joint behaviors of the Dieh-Dou structure. A pushover experiment of Dieh-Dou Jia-Dong is implemented. NDI, LVDT and image measurement system are used to measure displacements of joints and deformations of Dieh-Dou Jia-Dong. In addition, joint rotation-moment relationships of column restoring force, purlin-supporting, Dou-Shu, Dou-Gong brackets, primary beam-Gua Tong, secondary beam-Gua Tong, Tertiary beam are bulied. From Jia-Dong experiments, formulations of joint rotation are proposed.

Keywords : pushover experiment, Dieh-Dou timber frame, image measurement system, joint rotation-moment relationships

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