



Reinforcement of Shear Failure with Long Screw in Moment-Resisting Joint

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Summary:

Moment resisting joint with lagscrewbolts shows good mechanical performance and aesthetic. However, beam and column joints rarely showed a brittle shear failure in a panel zone of a column in previous studies. Therefore, a joint system reinforced by long screws was developed to prevent from the failure in this research. The maximum shear strength of the joint increased with increasing the number of long screws. However, the average of six screws specimens was lower than that of four screws, because the glulam and some of the screws were damaged due to the narrow space between the screws during an inserting process of the screws.

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Resource Link

http://schr.ws/hosted_files/wcte2014/b1/ABS502_Nakatani_web.pdf