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# REVIEW OF VARIOUS SHEAR CONNECTORS IN COMPOSITE STRUCTURES

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## ABSTRACT

Shear connectors are devices that provide shear connection at the interface of steel girders and reinforced concrete slabs in composite structures to accomplish composite action in a flexure. The seismic response of composite structures can be controlled using properly designed shear connectors. This state-of-the-art review article presents considerable information about the distinct types of shear connectors employed in composite structures. Various types of shear connectors, their uniqueness and characteristics, testing methods and findings obtained during the last decade are reviewed. The literature, efficacy, and applicability of the different categories of shear connectors, for example, headed studs, perfobond ribs, fibre reinforced polymer perfobonds, channels, pipes, Hilti X-HVB, composite dowels, demountable bolted shear connectors, and shear connectors in composite column are thoroughly studied. The

conclusions made provide a response to the flow of the use of shear connectors for their behaviours, strength, and stiffness to achieve composite action.

## KEYWORDS

Anchors and anchorages, Composite structures, Shear connectors, Push out test, Concrete steel interface

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DESIGN STRENGTH OF CONCRETE-FILLED STEEL COLUMNS  
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