Evaluation Method of Shear Capacity of Steel Reinforced Concrete Beam Considering Shear Span Effective Height Ratio and Support Condition

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Some calculation equations of design shear capacity of the steel reinforced concrete (SRC) member with simple supported condition are shown in Design Standards for Railway Structures and Commentary (Steel-Concrete Hybrid Structures). However, there are some equations that are applicable to a certain member because applicable scope of these equations is not certain. In addition, support condition of the transverse beams of the railway viaduct is different from simple support because both its ends are fixed. In this study, applicable scope of the exiting equations was clarified, and a calculation equation of shear capacity of the SRC beam under antisymmetric moment distribution was proposed.