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Column Seismic Retrofit Using Fiberglass/Epoxy Jackets

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The concept of retrofitting bridge columns to enhance flexural and shear performance using the Tyfo Fibrwrap System composite jackets in critical regions is discussed. Results of tests of three large scale flexural columns with longitudinal reinforcement lapped in the flexural plastic hinge region, and of four shear columns tested under double bending are reported. The experimental results indicate that properly designed composite jackets can inhibit lap-splice failures in hinge regions, and provide sufficient shear strength to columns with shear strength deficiency to ensure flexural response.