



## Strength and Drift Capacity of GFRP-Reinforced Concrete Shear Walls

By Ahmed Sabry Farghaly

SPS Jun 2014, 2014. Taschenbuch. Book Condition: Neu. 225x149x15 mm. This item is printed on demand - Print on Demand Neuware - With the rise in constructing using FRP reinforcement, owing to corrosion problems in steel-reinforced structures, there is a need to provide guidelines for laterally loaded members. Currently, design guidelines for lateral load resistance for glass-FRP- reinforced shear walls are not available in codes. For this objective, primary guidelines for seismic design of a slender GFRP-reinforced shear wall in moderate earthquakes regions was presented. The ultimate limit state was addressed by providing strength capacity that limit ductility demand to their safe flexural displacement capacity (ductility or deformability capacity). The strength demands were derived from ground motion spectra using reduction factors that depend on both the strength and energy dissipation of the structure. Deformation capacity was derived by estimating virtual yield and maximum allowable deformations in which suggestions were made for appropriate definitions. Strength reduction factor was studied and proposed based on the carried experimental program. Definition of virtual plastic hinge for GFRP-reinforced walls was described and its length was estimated based on experimental observations and calculations. 196 pp. Englisch.



**READ ONLINE**  
[ 3.76 MB ]

### Reviews

*These kinds of publication is the greatest pdf available. Better then never, though i am quite late in start reading this one. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- **Lorena Streich**

*It becomes an awesome pdf that I have actually read through. It really is full of knowledge and wisdom You may like how the writer compose this book.*

-- **Amanda Gleichner**