The current methodology results in excessive high reinforcement ratios questioned by many experts. Therefore, more research is warranted to validate reinforcement ratios, or suggest new reinforcement ratios.

To examine the appropriateness of the current ACI 440 “Guide for the Design and Construction of Concrete Reinforced with FRP Bars” requirement for secondary reinforcement that was developed without an experimental database.

GFRP reinforced specimens cast and exposed to the environment showed no significant difference in shrinkage/thermal cracking compared to the mild steel reinforced specimen at 180 days. FEM models of the specimens are currently being developed/studied.