

ABSTRACT

METHOD FOR STRENGTHENING REINFORCED CONCRETE STRUCTURES

In a method for strengthening reinforced concrete structures using a fiber reinforced plastic plate by coating a resin on a concrete surface of reinforced concrete decks or girders and then laminating a fiber reinforcement in a sheet form thereon followed by resin impregnation and cold cure, the improvement wherein

(A) the resin is a cold curable epoxy resin having density of 40 to 200 poise and a thixotropy index of 3.0 to 8.0, and

(B) the fiber reinforcement is a unidirectional strengthening fabric in which a series of ancillary weft threads are allocated on both sides of a sheet surface of yarn strips comprising flat reinforcing fiber-multifilament yarns, which are arranged unidirectionally and in parallel to form a sheet and have no flex where stress is concentrated, and a series of ancillary warp threads parallel to the multifilament yarns are woven with the ancillary weft threads to hold the yarn strips in one piece, interstices existing between adjacent reinforcing fiber-multifilament yarns.

This Sheet Has Been Replaced

