

# Fiber Sheet Adhesion construction method

## [ Outline ]

In order to prevent projection by the corrosion and a fracture of PC steel materials in PC bridge superstructure, it is a reinforcement construction method which uses together the composite fiber sheet of an aramid and nylon with a band steel plate or (length and width aramid sheet), and sticks it on a horizontal beam end and a floor-slab upper surface part with adhesives.

## [ The background of development ]

PC steel stick projected by the corrosion fracture of PC bridge top Takumi's horizontal bundle steel materials, or perpendicular bundle steel materials, and the accident which lacks the concrete of a fixing part with the energy occurred in recent years. The fiber sheet adhesion construction method was developed in order to prevent these accidents.

## [ Feature ]

By using together the aramid nylon fiber sheet and band steel plate of high toughness, absorb the projection energy of PC steel stick and prevent the piece exfoliation of concrete with the prevention from a projection.

Even when projection of PC steel stick arises, Should be able to check the changing situation of concrete for appearance with viewing or an infrared irradiation machine.

Since work only pastes up a fiber sheet and a hoop iron board by resin, it is easy to construct.

It can construct only manually and does not need a heavy industrial machine.

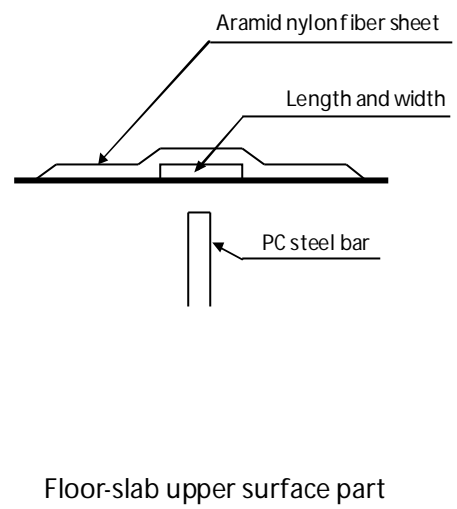
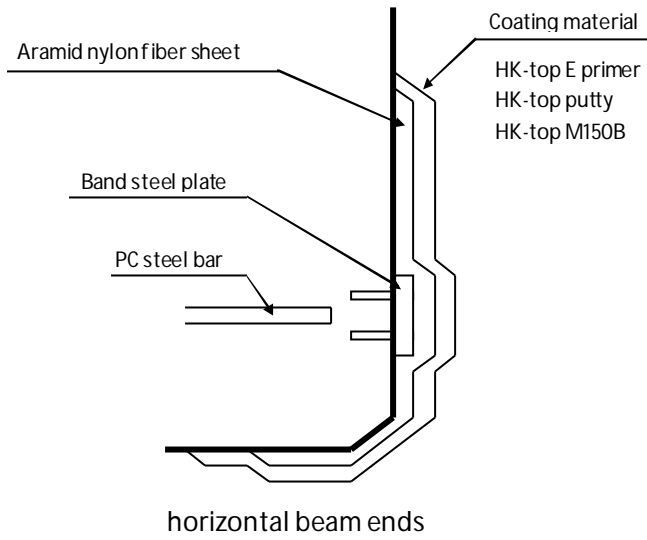
Since it is a sheet type, It can respond to the complicated shape of a structure flexibly, and can perform processing and cutting easily on the spot.

Since It is lightweight, there is no weight burden to superstructure and substructure.

## [ Application ]

PC bridge superstructure which used PC steel stick for the steel materials for horizontal bundles (Horizontal beam end)

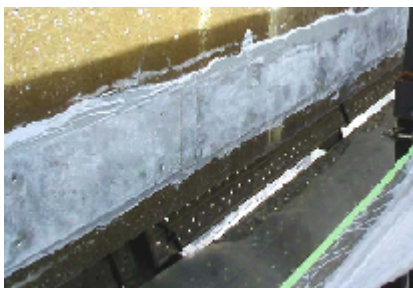
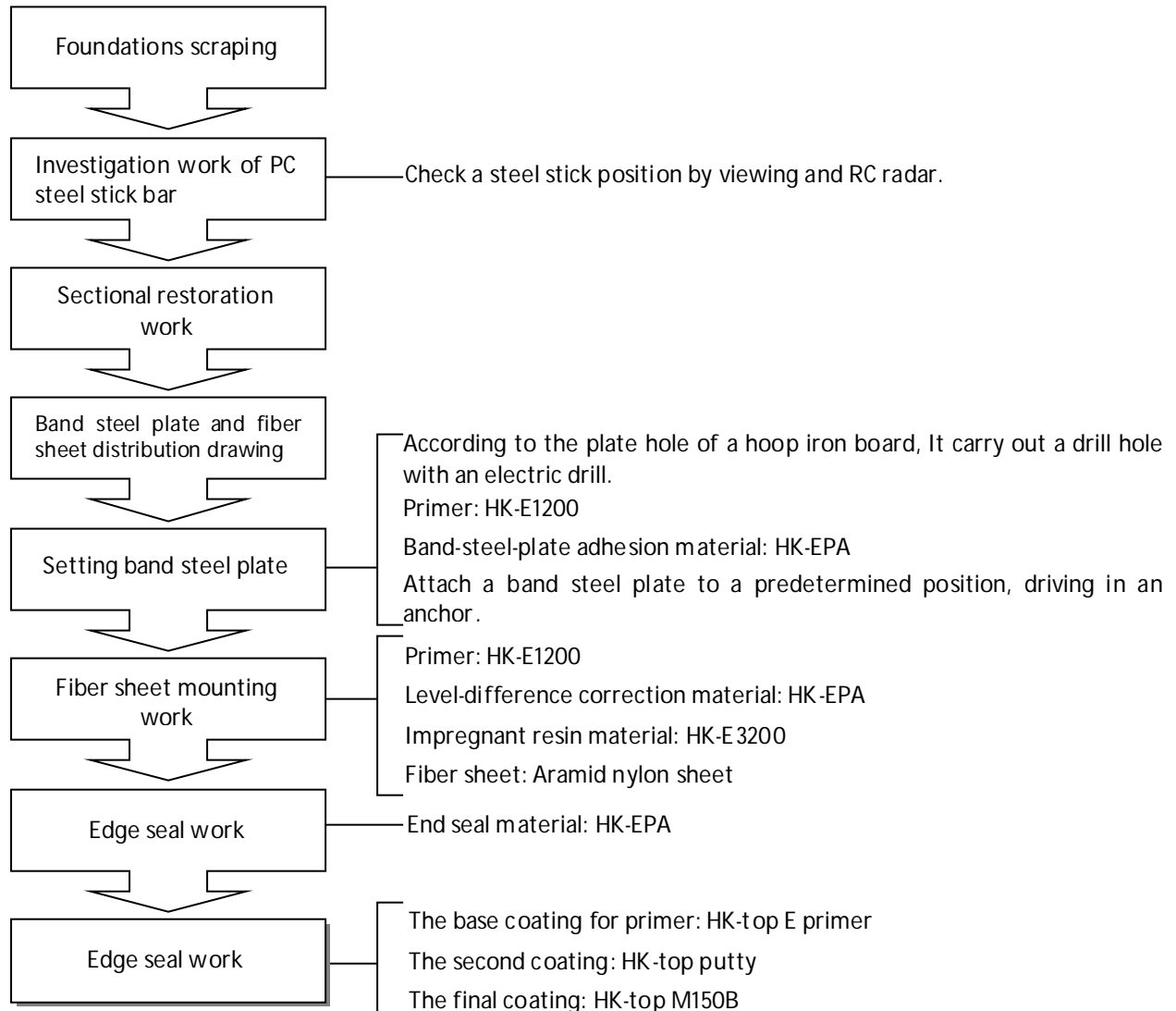
PC bridge superstructure which used PC steel stick for the steel materials for perpendicular bundles (Floor-slab upper surface part)



Please note handling enough about all documents concerning the fiber sheet adhesion construction method so that information on the character of the industrial method should not leak.

## [ Construction procedure ]

The construction procedure of the fiber sheet adhesion construction method for horizontal beam ends is shown. The construction procedure for floor-slab upper surface parts is also almost the same.



Setting band steel plate for finish  
( horizontal beam end )



Fiber sheet mounting work  
( horizontal beam end )



Fiber sheet mounting work  
( floor-slab upper surface part )

### 【 Reference 】

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