

ITEM 09563.99 M - FIBER REINFORCED POLYMER SHIMMING OF PRESTRESSED CONCRETE BEAMS

DESCRIPTION

This work shall consist of furnishing and placing fiber reinforced polymer (FRP) materials between prestressed concrete box beams.

MATERIALS

The FRP shim stock shall have a minimum compressive strength of 30 MPa. The FRP shall be obtained in such thicknesses that the required total thickness is fabricated from 3 or less laminates.

Epoxy cement shall be compatible with the FRP material and portland cement concrete.

CONSTRUCTION DETAILS

Concrete surfaces to receive shims shall be prepared by scraping to remove all loose material, dirt and debris.

Place shims within 300 mm of the face of an abutment or pier and at approximately equal spaces of less than 2 meters along the span.

Wipe the shims with a clean acetone soaked rag then abrade shim faces to remove all gloss prior to laminating and installing.

Measure the spaces between the prestressed concrete box beams and laminate FRP shim stock so that the shims are within 3 mm of filling the gaps. Shims shall be 200 X 200mm minimum.

Install the shims so that they are above the chamfered edges of the beams. Hold the shims in position as necessary until the epoxy sets.

METHOD OF MEASUREMENT

Measure the work as each shim installed as required.

BASIS OF PAYMENT

The price bid per shim shall include all labor, materials and equipment.