

Product Evaluation

RE: Review of Tyfo UC Composite Laminate Strip System

PRODUCT

Tyfo UC is manufactured by FYFE company LLC located in San Diego, California and distributed by Fibrow Rap Installations Limited located in White Rock, British Columbia.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Tyfo UC is an epoxy-carbon laminate combined with resins to create a composite system. The Tyfo Fiber Wrap systems have been tested and proven at over fifty universities and accredited private labs. Carbon, glass or aramid reinforcing fibers are combined with high quality resins to produce a multitude of high performance FRP strengthening systems, which gives design engineers a wide range of options to meet the individual needs of a project. This product has been approved by the Ministry of Transportation of British Columbia and several other DOT's. Website for this product:

<http://www.fyfeco.com/>

DESCRIPTION

Tyfo UC Composite Laminate Strip System is comprised of a high modulus; high tensile strength, pull-formed, epoxy-carbon composite adhered to the primed substrate by a layer of Tyfo TC Epoxy.

POTENTIAL USAGE

Tyfo UC Composite Laminate Strip System is used for post-reinforcing of general building construction, industrial buildings, parking structures, bridges and other structures constructed of concrete, wood and steel.

STANDARDS

Canadian Highway Bridge Design Code CAN/CSA S6-06.

CSA S806-02

ISIS Design Manual "FRP Rehabilitation of Reinforced Concrete Structures"

American Concrete Institute ACI 440.2 – Guide for the Design and Construction of Externally Bonded FRP systems for Strengthening Concrete Structures.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has used various FRP wrap systems on a trial basis.

APPLICABLE STANDARDS

Currently Alberta Transportation does not have guidelines or specifications pertaining to the use of Fiber Reinforced Polymer wrap systems.

RECOMMENDATIONS

Tyfo UC be listed as a Potential Product under Alberta Transportation Products List, Bridge Fiber Reinforced Polymer Wrap Systems – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

Notes:

- System must be engineered for each project.



Product ID: 8066-1-3
Initiation Date: February 2009
Revision Date: October 16, 2014
Expiry Date: September 2017

- System must be applied by a licensed applicator

TRIAL PROJECTS

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow
Raymond Yu/Abdul Waheed\\Dave Besuyen