

Product Evaluation

RE: Review of Tyfo SCH-41 Composite Fiber Reinforced Polymer Wrap System

PRODUCT

Tyfo SCH-41 is manufactured by FYFE company LLC located in San Diego, California and distributed by Fibrw Rap Installations Limited located in White Rock, British Columbia.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Tyfo SCH-41 is a specialized carbon, glass hybrid fabric combined with resins which in combination creates a composite system. The Tyfo Fiber Wrap systems have been tested at over fifty universities and accredited private labs. 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 SCH-41 Composite Fiber Reinforced Polymer Wrap System is composed of Tyfo S Epoxy and Tyfo SCH-41 Reinforced Fabric, which is NSF certified. Tyfo SCH-41 is a custom, uni-directional carbon fabric with glass cross fiber for added strength and fabric stability during installation. The carbon material is orientated in the 0° direction. The Tyfo S Epoxy is a two-component epoxy matrix.

POTENTIAL USAGE

Tyfo SCH-41 Composite Fiber Reinforced Polymer Wrap System can be used to strengthen bridges for increased load ratings, seismic retrofit, impact damage repair and protection and extension of service life.

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 SCH-41 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.
- System must be applied by a licensed applicator



Product ID: 8066-1-1
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TRIAL PROJECTS

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow
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