

COMPOSITE BRIDGE CONNECTS COMMUNITIES

A modern pedestrian bridge was recently completed to connect a newer multifamily housing community with an adjacent single family housing community in Charlotte, NC. In 2015, an agreement was put in place to build a pedestrian bridge to connect the adjacent communities to the county's ongoing Greenway Trail Project.

The desired outcome of the project is to provide over 30 miles of walking trails to connect residents with greenways, housing communities, businesses, and community parks within the urban footprint of the county to alleviate vehicular congestion.

However, the pedestrian bridge project was placed on hold due to a storm water diversion project which wasn't completed until 2022. Upon its completion, design and specifications were submitted for the pedestrian bridge. The engineering specifications called for a bridge designed to accommodate cyclists and pedestrians using modern polymer materials. As this project was located within a densely populated community, the time sensitive project had to be constructed onsite without the use of cranes and various earth moving equipment.

Areté Structures and Arété Engineers worked with Hall Contracting who installed what is likely the first continuous multi-span FRP bridge in the United States. This project's specific continuous truss design was outfitted with EXTREN[®] channels, tubes, and plates pultruded in Series 525 resin. For flooring, 24" SAFPLANK[®] panels were coated with a medium epoxy grit for added slip resistance.

The 120-ft bridge connects Lyon Court with Veteran Lane and has an 8-foot-wide travel lane outfitted with bollards on each end to prevent vehicular access.

Community stakeholders have all been delighted with the installation process of the bridge and addition to their community. ●



TECHNICAL DATA

Product:	Continuous Truss Multispan Pedestrian Bridge
Process:	Pultrusion, Fabrication
Materials & Sizes:	EXTREN [®] Series 525 Structural Shapes: - channel, tube, plate SAFPLANK [®] Interlocking Decking Planks: - 24" planks with medium epoxy grit coating
For:	Areté Structures
User:	A residential community in Charlotte, NC



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