

**ArchitEX™**  
Structural Profiles & Structures

**Composite Structural FRP**

The ArchitEX™ range of products comprises of a variety of structural profiles that are manufactured from fibreglass reinforced plastic (FRP). It is through continual research and development that this wide range of fibreglass sections, beams, and profiles are fabricated consistently to ensure satisfactory results even in challenging structural conditions.

The FRP beams, columns and associated sections are produced from high quality FRP material, which makes structures strong as well as rewarding. Durable construction FRP such as fibreglass sections and beams enhances the strength of the entire framework as well as infrastructure. Both fibreglass beams and sections are specifically designed to endure all sorts of environmental inconsistencies.

**Scope of Shapes**

Easy integration to various parts due to the capability to essentially shape any item with a constant cross section which can be pultruded.

**Composite Design Engineering**

A standard shape customised into a pultrusion by modifying the resin or reinforcement to achieve a particular customer need.

**Optimising Resins**

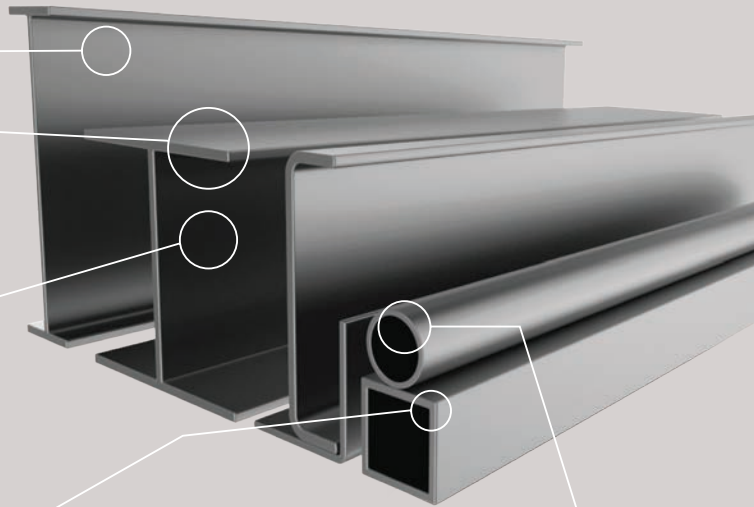
Standard resins can be modified or special resins can be used to maximise performance of the pultrusion in challenging environments, such as those found in high temperature or extremely corrosive areas. Typical resins include polyesters, vinylesters, PVC, epoxies, phenolics, urethanes and blends.

**Choice of Reinforcements**

The type, form, placement and quantity of reinforcements can be customised to optimise economy, develop ascribed strength and create or enhance other physical characteristics of a pultruded part. Typical reinforcements used include glass or carbon fibres in multifilament strands, mat (long fibres held together with a resinous binder) or stitched fabrics.

**Core Materials Options**












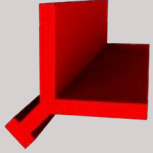
Treadwell provides a range of core material options with comprehensive experience in pultruding over various materials including foam, balsa, polyethylene and aluminium.



**Structural Design & Analysis**

Our experienced team of engineers and designers can help conceptualise your design and maximise all FRP structural components to offer the most cost effective and simplest solution.



ArchitEX <sup>TM</sup> Range		
C Channel	I-Beam	WF-Beam
		
Double Web Beam	Unequal Leg Angle	Equal Leg Angle
		
Square Hollow Section	Rectangular Hollow Section	Circular Hollow Section
		
Circular Round Bar	Solid Bars	Embedment Angle
		

Please refer to the ArchitEX<sup>TM</sup> product guide for more information.