

## COMPOSITE PULTRUDED STRUCTURAL PROFILES

Transpower has grown in recent years to be one of the world's most important pultruders. With over 125 pultrusion lines at its Vadodara, Gujarat, India, facility, daily high volume production, based upon in-house manufactured resins and technical fabrics enables rapid order processing.

The range of standard profiles is presented here, showing details of the shapes regularly held as stocked items. The standard resin system for stocked items is fire retardant isophthalic polyester. Isophthalic polyester, vinyl ester and phenolic grades are available upon request.

Transpower pultrusions are manufactured to comply with EN 13706 and CTI 137. Full mechanical, physical and section properties can be obtained by referring to the Transpower Design Manual. Should you require any assistance with the design of a structure using Transpower pultruded profiles, please speak with our Design Team.

### STANDARD PULTRUDED STRUCTURAL PROFILES

Profile	Weight (kg/m)	Modulus (GPa)	Strength (MPa)
Channel	1.15	1.15	1.15
U-Channel	1.15	1.15	1.15
Angle	1.15	1.15	1.15
Flat Bar	1.15	1.15	1.15
Channel	1.15	1.15	1.15
U-Channel	1.15	1.15	1.15
Angle	1.15	1.15	1.15
Flat Bar	1.15	1.15	1.15
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Angle	1.15	1.15	1.15
Flat Bar	1.15	1.15	1.15

## COMPOSITE LIGHTING POLES



### ADVANTAGES OF COMPOSITE

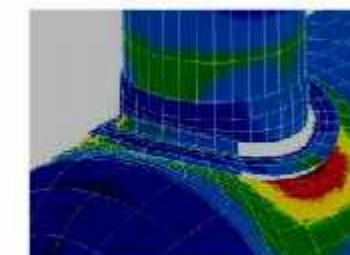
- Light weight :**  
Lighter than Steel, Concrete & Wooden Poles resulting in lower installation and transportation costs.
- Maintenance:**  
No Maintenance required due to its inherent technical properties.
- High Mechanical Strength:**  
Low mechanical stiffness of the composite material enables high mechanical strength of the Poles.
- Frangibility:**  
In road traffic accidents involving poles, Composite Poles cause fewer deaths than steel or concrete poles, due to their ability to fail in a controlled manner.
- Economical:**  
Composite Poles are less expensive than conventional poles and involve lower installation costs due to their light weight. They can be hand-carried to inaccessible places, do not require any surface treatments, grounding servicing or painting.

## FRP COOLING TOWERS



### PROCESS CAPABILITIES - COMPOSITES

- Open - Contact Molding
- Resin Transfer Molding
- Vacuum Assisted Resin Injection
- Vacuum Bagging and Resin infusion
- Pultrusion
- Filament Winding
- Centrifugal Casting
- Carbon Fiber Molding
- SMC/DMC
- Polyester Casting



### DESIGN CENTER

- A modern Facility for Complete Composite Solutions for Structures like Cooling Towers, Telecom towers and others like Railways.
- The present capabilities includes
  - Designing of construction of towers
  - Analysis
  - Structural Mock-up

### REFERENCE STANDARDS / DESIGN GUIDELINES

- EUROCOMP Design code and handbook
- CTI Standards
- Mechanical properties from tested sample in Transpower