



CUSTOM PULTRUDED SYSTEMS • PLATFORMS & BRIDGE DECKS • PULTRUDED STRUCTURAL SHAPES & DECKING •
SHEET PILE SYSTEM • UTILITY POLES & CROSS ARMS

PULTRUDED COMPOSITE PRODUCTS & SYSTEMS CAPABILITIES BROCHURE



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CREATIVE PULTRUSIONS - THE COMPANY

Creative Pultrusions, Inc., (CPI) is the world leader in pultrusion manufacturing. Our commitment to continuous process improvement and to become "Best in Class" has transformed CPI into a world renowned pultruder that specializes in pultruding large custom profiles, while utilizing high performance resins in combination with CPI's proprietary high pressure injection process.

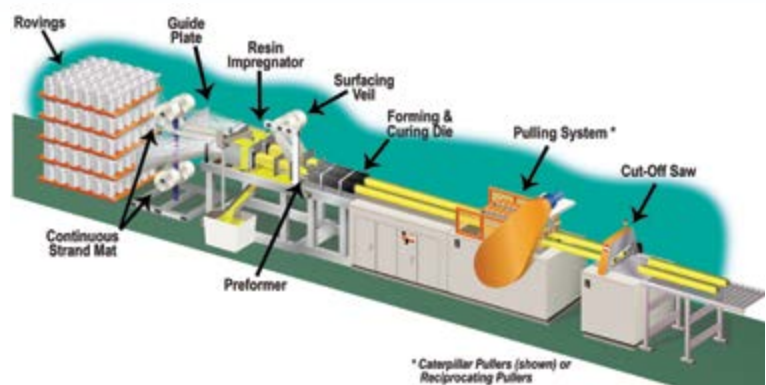
Our quality process is based on a strong commitment to continuous improvement in products, service, operations and client satisfaction. It all adds up to the kind of manufacturing experience you would expect from a world-class pultruder that never settles for status quo. CPI can take your project from concept to production. Our staff of talented engineers combined with over 46 years of pultrusion experience makes CPI the right choice to serve you!

OUR HISTORY

Over the course of 46 years, CPI transitioned into the company it is today. In September of 2008 CPI was acquired by Hill & Smith Holdings PLC (HS), a global leader in the design, manufacture and supply of infrastructure products, galvanizing services and building and construction products. HS has sales of over \$700 million. Headquartered in the UK and quoted on the London Stock Exchange, HS serves its customers from facilities in 7 countries: Australia, France, India, Norway, Sweden, UK and the USA.

THE PULTRUSION PROCESS

Pultrusion is a continuous manufacturing process utilized to make composite profiles with constant cross-sections whereby fiberglass reinforcements, in the form of roving and mats, are saturated with resin and channelled into a heated die. The profile exits the die in a solid state and in the form of the desired cross-section.



FLOORING PRODUCTS AND MULTI-CELLULAR PANELS

In many cases, pultruded flooring products are the lowest cost solution while enhancing your walkway project. The extremely light weight, corrosion resistant, ADA compliant walkway decking products typically install 30% faster than traditional walkway materials.

SUPERGRATE® PULTRUDED GRATING

is available in three systems with a variety of percent open options. The extremely high strength, high modulus grating system is ideal for heavier loads at longer spans.



SUPERGRATE® MOLDED GRATING

is ideal for highly corrosive applications. The lightweight molded grating is used extensively where light weight and corrosion resistance is a must.

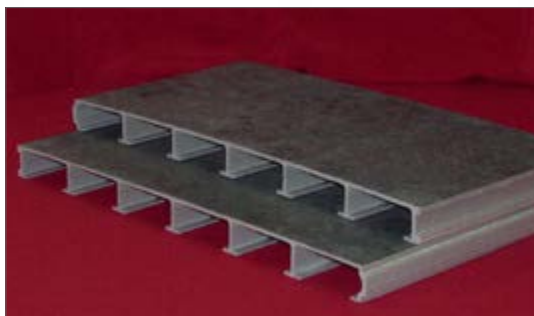


FLOWGRIP® FLOORING

is a single piece metric sized panel system that features a unique interlock system. Speed of installation and reduced trip hazards make this system a must for your project.



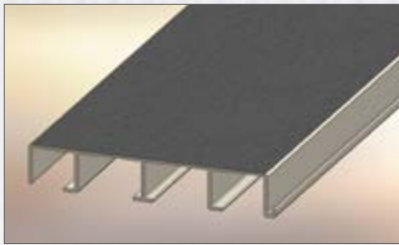
SUPERPLANK® is a single piece imperial sized panel system that features a unique interlock system. Speed of installation and reduced trip hazards make this system a must for your project.



FLOORING PRODUCTS AND MULTI-CELLULAR PANELS

SUPERDECKING

is the ideal candidate for industrial applications such as roof top walkways and tank covers. This high modulus decking system is manufactured with Creative's proprietary resin injection technology.

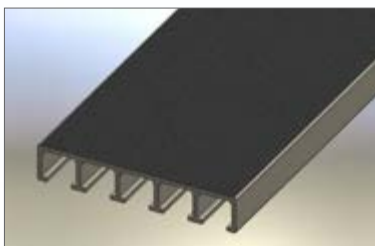
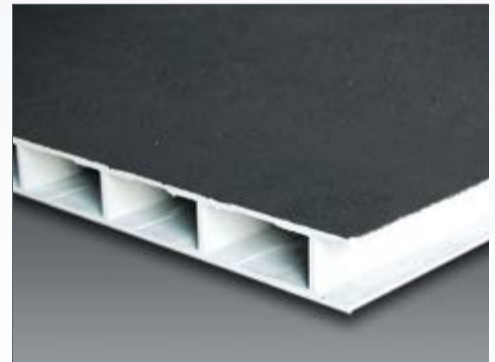


TUF-DEK™ DECKING SYSTEM

offers an economical solution for tank covers and walkways.

SUPERPANEL

deck and wall panel profiles are multi-cellular profiles that can be foam filled for added thermal properties. The light weight heavy duty panels can be used for walkways, driveways and for heavy duty wall and roofing applications. The heavy duty panels are available in 2.5" and 4.5" depths and have been designed to take the rigors of vehicular and lift truck traffic. If you are looking to replace concrete and steel decks with a lower cost solution Superpanel is your ideal candidate! Superpanel is also available in a light weight version that is 24" (610 mm) wide by 1.25" (32 mm) in depth. This panel is the ideal candidate for wall panel applications. It has been used extensively for the construction of cooling towers. The light weight, fire retardant and corrosion resistance panel is the lowest cost solution for your project.

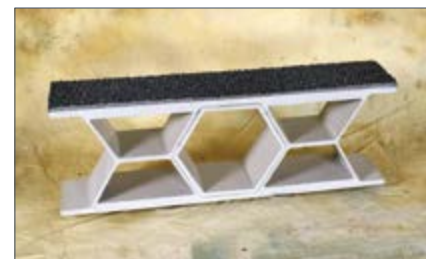


HEAVY DUTY PLANK

was developed for extreme applications. This unique heavy duty profile has been used for low boy decks and heavy duty applications where light weight and corrosion resistance counts!

SUPERDECK®

is a pultruded HS25-44 rated bridge deck that was developed to replace deteriorating concrete decks across the nation. The light weight, highly corrosion resistant bridge deck can be installed at a rate of 800 square feet per hour! It is inert to deicing salts and virtually maintenance free.



SIMPLY...WHAT DO WE DO?

WE TRANSFORM COMPOSITE MATERIALS INTO PRODUCTS SUCH AS...



environmentally
friendly composite
UTILITY POLES



FRP DECKING
used for mass transit
platforms & bridge decks



**COMPOSITE
COOLING TOWERS**
constructed with custom
patented pultruded
profiles



**STANDARD
STRUCTURAL
PRODUCTS**
provide lasting
performance



**SHEETPILE
SYSTEMS**
with locking tongue
and groove options



**FRP BRIDGE
DECKING**
extremely lightweight

THE PULTRUSION ADVANTAGE

Pultruded profiles are used extensively around the world providing the lowest cost solutions as part of engineered systems or stand alone products. The most desired attribute is the superior corrosion resistance over traditional building materials such as wood, steel and concrete. Combine the superior corrosion resistance attributes with:

- light weight
- high strength
- low maintenance
- ease of fabrication
- superior dielectric strength
- lowest installed cost
- "green"

And its easy to see why pultruded profiles are gaining significant market share in infrastructure and corrosion related markets.



CUSTOM PRODUCTS

Creative is the world renowned leader at manufacturing large custom structural profiles. Our very large production machines are unmatched in the industry and are one of the keys to successfully manufacturing extremely large pultrusions. Our engineers have well over 100 years of combined experience at designing and manufacturing profiles for custom applications. In fact, Creative provides turn key solutions, taking products from your conception through our design and tooling process to final production. In many cases value added product assembly is completed in our state of the art fabrication plant.

FINITE ELEMENT ANALYSIS (FEA)

Creative offers turn key design solutions. Enhancing our engineering capabilities, Solid Works Simulation by Dassault Systèmes along with other third party software is used to optimize the fiber construction and part geometry. Beam, shell, and solid element types are available within the software.



PULTEX[®] STANDARD STRUCTURAL AND SUPERSTRUCTURALS

CPI offers an array of products and systems that are available in various resin systems and reinforcement packages to fit your application requirements.

Pultex[®] SUPERSTRUCTURALS span further and carry higher loads than traditional pultruded I and W Shapes!!

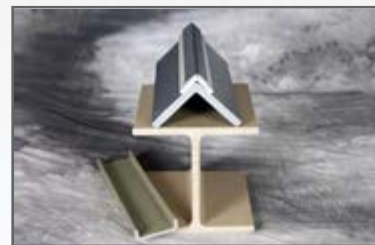
Pultex[®] SUPERSTRUCTURAL profiles out perform all other pultruded standard shapes, bar none! The optimized fiber architecture and high fiber volume fraction is the catalyst that makes the Modulus of Elasticity (MOE), of the SUPERSTRUCTURALS, superior to all other I and W shapes on the market. They are 43% more stiff than ordinary pultruded profiles!

Pultex[®] SUPERSTRUCTURAL angles have been optimized for connections and are the number one choice for superior connection performance!

Pultex[®] standard structural profiles and SUPERSTRUCTURALS will provide you with the lowest cost solution for your corrosion application!

Pultex[®] standard structural profiles are produced in the three resin systems:

- **Series 1500 Isophthalic Polyester (I)**
- **Series 1525 Isophthalic Fire Retardant (IFR)**
- **Series 1625 Vinyl Ester Fire Retardant (VFR)**



SUPURTUF[™] POLYURETHANE PULTRUSIONS

SUPURTUF[™] polyurethane profiles are the most advanced, high strength and impact resistant pultrusions in the market! The **SUPURTUF[™]** series 4000 system was made possible with the development of high pressure injection technology. The "creative" engineering team at CPI developed the proprietary manufacturing method over a three year time frame. The resultant has been demonstrated to be twice as strong than traditional polyester and vinyl ester profiles. The impact and interlaminar shear strength values are exceptional!! The high pressure injection process allows for production to take place with a high fiber volume fraction, the end result is a significantly higher modulus of elasticity.

Creative's **SUPURTUF[™]** polyurethane profiles are easily fabricated. In fact, fabrication time and quality can be greatly improved by capitalizing on the "surface prep. free" attributes of the polyurethane pultrusions.

Do you have an application where superior impact strength and toughness is required?? The **SUPURTUF[™] Series 4000** may be the answer.



SUPERLOC® COMPOSITE SHEET PILE SYSTEM

SuperLoc® All Composite Sheet Pile System is a patented system that provides a solution for deteriorated waterfront structures subjected to harsh marine environments. SuperLoc® will not corrode, decay or spall, which reduces maintenance costs and future replacement costs. SuperLoc® is available in three series:

- **SuperLoc® 1610 – Commercial Heavy Duty**
- **SuperLoc® 1580 - Residential/Commercial**
- **SuperLoc® 1560 - Residential Medium Duty**



CABLE TRAY

Creative manufactures fiberglass pultruded cable tray, struts and framing components for use in the electrical market. Our products are superior to traditional materials offering the following benefits:

- **Design Flexibility**
- **Compound Surface Shape**
- **Oriented Strength**
- **High Strength to Weight Ratio**

Cable trays and strut systems are offered in Series 1525 Isophthalic Fire Retardant (IFR), 1625 Vinyl ester Fire Retardant (VFR) and low smoke zero halogen fire retardant systems, depending on specifications of individual applications.



COMPOSITE BRIDGE DECK

The high performance characteristics of fiber reinforced polymer (FRP) composite decking are ideal for new and replacement bridge construction. Weighing only 20% of reinforced concrete, the product provides 6 to 7 times the load capacity. The design engineered modular system offers long service life, reduced installation and maintenance costs, with increasingly significant advantages on larger span, and higher average daily traffic type bridges.



SUPERARMOR FRP BALLISTIC PANEL

SUPERArmor FRP Ballistic Panels were developed to protect human life in military installations court rooms and government buildings. The light weight antifrag panel is UL752 level 3 rated. The panel offers protection from small arms fire and fragmentation caused by explosions. The corrosion resistant panel will stand the test of time and will perform if ever called upon.

POWERTRUSION PULTRUDED DISTRIBUTION POLES AND CROSS ARMS

Light weight, corrosion resistant, non conductive and environmentally inert summarize the pole and arm attributes over traditional wood, concrete and steel distribution systems. The patented Powertrusion pole is the lowest cost solution distribution pole on the market. Utilities are quickly recognizing the benefits of the pultruded pole. Limited access, sidewalk encroachment and "green" sets and termite and woodpecker damage prone areas are making the Powertrusion pole the pole of choice for utilities around the world.



FABRICATION CAPABILITIES

CPI offers value added professional fabrication services that can save your organization time and money. We match our highly trained and skilled workforce with our state of the art equipment and top notch engineering team to provide you with top quality fabrication services. Our custom built Computer Numerical Controlled (CNC) fabrication machines are second to none and produce precision fabricated parts. Our fabrication capabilities include:

- Routing
- Drilling
- Painting
- Cut to precision length
- Resin sealing
- Antiskid walkway surface application
- Sanding
- Surface preparation prior to bonding
- Prefabricated structures and shop assembly and direct shipment



Reduce your process time, labor cost and dust issues by taking advantage of CPI's top notch fabrication capabilities.

COMMITMENT TO THE ENVIRONMENT

Creative has made significant investments to do our part for the environment. In 2003, Creative committed to reducing styrene emissions by 90% on all new with tooling made after 2003. The commitment is being accomplished as a result of direct resin injection technology. The technology, not only allows for a reduction in styrene emissions, but also a reduction in waste associated with start up and pull dry. On average the injection technology reduces resin and glass waste, generated during start up and pull dry, by 75%. By utilizing low HAP high solids grit and paint, Creative has been able to reduce the emissions of Hazardous Air Pollutants (HAPs) by over 95%. Creative's additional investments in LEAN manufacturing has reduced residual and energy waste by more than 30%. Creative is committed to the environment now and in the future!



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INDUSTRY ASSOCIATIONS



PLEASE SCAN WITH PHONE

