

**SOLUTION**

L&amp;L Reinforce

**VERSION**

March 2021

# Continuous Composite Systems™

## Structural Reinforcement Technology.



Continuous Composite Systems™ (CCS™) are continuous fiber-reinforced composite materials that can be used as a carrier when combined with our highly engineered sealants and/or structural adhesives.

They are constant cross-section pultruded profiles, designed to provide strength, stiffness, and rigidity to a lightweight structure.

CCS™ enables a cost-effective reinforcement solution that brings extensive engineering knowledge and advanced CAE modeling offering improved strength-to-weight ratio compared to metals.

When integrating Composite Body Solutions™ (CBS™) with CCS™, a 3D multicomponent assembly can be developed which can also allow for steel stamping incorporation.

**KEY PRODUCT ATTRIBUTES:**

- Reduced weight – 75% lighter than steel; 30% lighter than aluminum
- Consistent quality due to continuous process method
- Cost competitive with alternative lightweight solutions
- Eliminates need for anti-corrosion coatings
- Nonconductive and insulating
- Low coefficient of thermal expansion
- Excellent structural properties
- High predictability in energy management
- CAE capabilities help deliver optimal profile designs
- Can be paired with L&L adhesive chemistry for multifunctional applications

**TYPICAL APPLICATIONS:**

- Bumpers
- Door Beams
- Windshield Reinforcements
- Cross Members
- Roof Rails
- Rockers
- Applications where aluminum extrusions are currently used or considered

**llproducts.com**