



Body Exterior

Structural Front End Module with Active Grille Shutter

OEM/Vehicle

Ford Motor Co.

2016 Ford Super Duty

System Supplier

Shape Corp.

Material Processor

Shape Corp.

Material Supplier

Celanese Corp.

Resin

Celstran LFT-PP



This all-composite design without metallic reinforcement is the first AGS -capable, injection-molded PP-LFT FEM bolster used on a heavy-duty pickup platform. Replacing steel and plastic/metal hybrids at a 3 lb/1.4 kg and \$3 USD savings/vehicle, the design offers parts consolidation with locating features that aid fit & finish, improves airflow, while meeting structural requirements for part deflections of <1mm on this 8,500 lb/3,856 kg class vehicle.