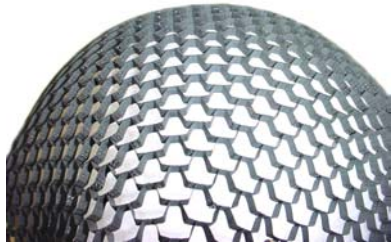


### UltraFlex Honeycomb Core



As more and more composite structures require unique bends and curvatures, Ultracor Inc. has introduced UltraFlex. UltraFlex is available as a honeycomb core with distinctive cell geometry. UltraFlex provides similar or higher mechanical properties than comparable hexagonal cores of equivalent density.

#### Features

- Exceptional Formability into Compound Curvatures
- No Anticlastic or Buckling of Cell Walls in Curved Conditions
- Equivalent Mechanicals as Hexagonal Cores
- Cost Savings in Curved Panels

#### Availability

UltraFlex can be tailor made using practically any non-metallic web material. Core densities can match existing hexagonal cores.

#### Properties Comparison

The table below compares the mechanical properties of the UltraFlex and the hexagonal core using the same prepregged material.

	UltraFlex Core (Product ID: UCF-204F-3/8-3.5)	Hexagonal Core (Product ID: UCF-180-3/8-3.5)
Flatwise Compression Strength (ASTM C365)	616 psi	590 psi
Flatwise Compression Modulus (ASTM C365)	47.6 ksi	46.2 ksi
Plate Shear Strength in L-direction (ASTM C273)	437 psi	440 psi
Plate Shear Modulus in L-direction (ASTM C273)	50.1 ksi	50.8 ksi
Plate Shear Strength in W-direction (ASTM C273)	233 psi	239 psi
Plate Shear Modulus in W-direction (ASTM C273)	21.0 ksi	21.0 ksi

Note: Although the UltraFlex cell is non-symmetric, the W-shear properties showed similar results regardless of shear direction.



*UltraFlex Honeycomb Core*