

Product Data Sheet: NidaCore FC



Nida-Core FC (for Flexible Core) is a flexible extra resilient continuous honeycomb product, able to be configured and engineered to suit the end user's requirements. Nida-Core FC can be made from virtually any thermoplastic material from polypropylene, polyethylene, polycarbonate to many others in nonwoven or film form. The FC is manufactured, using a patented 3D stacking system by means of thermal bonding, up to 100mm thick and up to 1250 mm in width, and as long as necessary. Thermal bonding means there are no glues or other additives in the process, making the product 100% recyclable and environmentally friendly. In general, applications for this product fall into at least one or more of the following areas: structural, separation, fluid transport and energy absorption. It is possible for an application to require or use all of these functional areas while some may require only one. Since the nature of the nonwoven is drastically altered, i.e., it is in a third dimension, its intellectual property potential is also drastically altered as well, and many new defensible areas become available from the same starting material.

Sample Test Data

Compression ASTM C365 (4'x4"x0.5")
Shear ASTM C365 (8"x2"x0.5")
Tension ASTM C297 (4x4x0.5")
Construction and Preliminary Data
1. 11mm Nominal Cell 200 gsm Tyvar Spunbonded Polypropylene(nonwoven)
48 kg/cubic mtr (calculated)
58 psi average – compressive strength (ASTM C365)
45 psi – shear strength (ASTM C365)
2. 11mm Nominal Cell 10 mil thick PP film
52 kg/cubic mtr (calculated)
68 psi average- compressive strength (ASTM C365)

Application	Key Property
Fluid Movement	Separation, Fluid Transport, Laminar Flow
Panel	Structural, Separation, Light weight
Gravel Replacement	Ease of Use, Structural, Separation, Fluid transport
Flooring	Nonabsorbent Underlay, Separation, Energy Absorption
Erosion Control	Structural, Separation , Fluid Transport
Seating	Engineered Resilience, Structural, Separation
Protection Sports Industrial	Separation, Energy absorption

- Affordable price , economical to ship (in compressed form)
- Can be engineered to suit your application
- Low moisture absorption available
- Able to integrate into existing vehicle parts design and manufacturing process
- Can be engineered to meet FMVSS 302 flammability requirements
- Can be designed to meet specific impact requirements from virtually any thermoplastic film or nonwoven material in variable cell size and thicknesses in unlimited length.
- Foam-filled available with polyurethane, polyisocyanurate or phenolic foams.