

# Pickleball Paddle Technology

## Pickleball Paddle Construction

Traditionally, paddles have been made from relatively rigid, non-compressible material. That is the traditional concept of a paddle and that is why the game is not played with a stringed racquet. Paddles that produce a trampoline effect or an effect similar to a stringed racquet are specifically disallowed. Common materials used are wood (cheaper paddles) and carbon fiber. The carbon fiber paddles usually have a honeycomb core made from a wafer board (Nomex) or aluminum or polymer.

A paddle consists of the Core, Face, Edge (guard) & Handle

- Core is a honeycomb design structure to produce strength without the weight such as wood
- The core materials consist of 3 alternative options
  1. Nomex (wafer board) – Very loud noise, lots of power, less control
  2. Aluminum – Finesse core – light weight and good control
  3. Polymer – Polypropylene (plastic) – has power and control (least & dull noise)

As the organization that sets the uniform standards for international pickleball, the International Federation of Pickleball (IFP) has the task of judging whether innovations in pickleball equipment may bring about a benefit to those who play, or whether such developments constitute a threat to the nature of the game

## Graphite vs. Fiberglass

Although there are no official studies showing that a graphite paddle is better than a fiberglass paddle most pickleball players think graphite is better. This thought probably comes because graphite paddles are generally lighter than fiberglass paddles and the assumption is that lighter must be better. A lighter paddle is better for quicker response at the net or better control. A heavier paddle is better for more power, people sometimes think a lighter paddle is better for power because you can swing it faster. This is true but you can also look at it with the equation  $F=MA$  or Force = Mass x Acceleration. Using this equation you can see that if you have a slow swing speed a heavier paddle will result in a greater force or more power.

## Paddle Life

A graphite or fiberglass paddle life depends on how often you play with it. If you are playing every day it will probably last a year or so, if you play a couple of times a week it will probably last 2-3 years.