The heavy Hobie Getaway (left) favors durability over weight savings, while the Weta leans toward light, stiff panels.

Which is Better: Rotomolded or Carbon-fiber Composite?

The ultimate material for multihull speed is prepreg carbon, foam, and honeycomb core—and as little of it as possible. At least that's the recipe for AC boats, C-Class cats, and stripped-down ocean racers. The builder's skill needs to equal that of the Boeing staff, and the price tag for such a boat awes a Ferrari owner.

Top-tier production boats swap E-glass for carbon, vinylester for epoxy, and aluminum for titanium. Panel stiffness and strength can approach that of carbon-sandwich laminates, but this comes with a significantly higher weight. The "street legal" multihull also needs to have greater longevity and be able to endure more wear and tear, adding extra weight to the design. The good news is that the build quality of multihulls, when it comes to control of fiber-to-resin ratios in laminates, is generally quite good. In fact, it's much better than what's seen in the average production cruising monohull, a boat that's less impeded by a few hundred pounds of excess resin.

The ability to handle scrapes, dings, and other abrasive contact can be an issue with a vessel that's designed primarily to be light and stiff. It's one of the reasons why many beach boat manufacturers have gone to rotomolded polyethylene structures rather than stiffer, stronger, and lighter foam sandwich construction. Just watch a kayaker with a rotomolded boat drag it up on a rocky shoreline. The fellow with the carbon-sandwich kayak cringes at the display. When it comes time to hoist these boats onto the roof, the tide turns. The owner of the rotomolded boat groans and the carbon/kevlar kayaker starts to smile. At least that's true up until he realizes that he could have bought four rotomolded boats for the price of his featherweight composite kayak. And that's why Hobie and Wilderness System are pioneering rotomolded multihulls, and Weta uses carbon fiber where it makes the most sense.