

**We get these questions all the time:
Are catamarans and trimarans really superior to monohulls? In what ways?
Does it matter to me? What are the key differences between catamarans and trimarans?**



Level Sailing

The most noticeable thing about sailing a catamaran or trimaran vs a traditional monohull is the lack of heeling. Stability is a big plus for families with young children or seniors who are not particularly steady on their feet. Because the boat is not **as** susceptible to the affects of wave action and does not heal the way a monohull does, it is much easier to walk around on deck and within the interior of the yacht while underway.

Even when powered up, a cat or tri will rarely heel more than 5-10 degrees before it's time to reef. Gone are the days of bracing yourself in the cockpit, and living your life underway at 20+ degrees of angle. It's a much more relaxing and convenient way to sail. No question about that.

Anyone who may be prone to seasickness will feel the effects of motion much less aboard a cat than they might on a mono. And the added stability on a cat makes the cook's job a lot less challenging both while underway and at anchor. Catamarans don't rock and roll the way monohulls do.

Speed—Sailing Performance

Cruising catamarans will typically be 25-30% faster than a cruising monohull of the same length! You basically get near racing monohull speeds, but with all the creature comforts that come with a cat. Trimarans are an entirely different deal, as they trend more toward the performance end of the spectrum, and can regularly double the sailing speed of monohulls on nearly any point of sail. Keep in mind that catamarans and trimarans are, however, much more sensitive to loading. Performance will suffer more on a cat that is loaded for cruising than on a comparable monohull. Keeping the boat light can be difficult, but is critical if fast passages are your goal.

Take note...A clumsy tack on a cat that brings the boat into irons can be disastrous! Getting a cat moving from a dead stop (or worse - sailing backwards) can be quite difficult. They just don't recover as quickly as a monohull. If close to shore or another yacht, a cat in irons could spell disaster. So, the argument could be made that the skill set required for catamaran sailing needs to be somewhat more advanced.

Reefing

Sailing catamarans and, to a lesser extent, trimarans too, require vigilance when it comes to reefing. Since they don't heel much, almost all additional wind force is converted to load on the rig. That's where the speed comes from. But since the pressure on the sails quadruples as the wind speed doubles, crews must keep an eye on the weather and reef in good time to keep the boat safe and sailing flat. In fact, a properly reefed cat or tri will sail faster too, in freshening breezes. All manufacturers supply written guidelines denoting apparent wind speeds that require additional reefing.

Safety – Unsinkability

There are many aspects to safety where catamarans and trimarans shine. Often overlooked is the safety margin introduced with level sailing (see above). It is much easier to keep crew aboard in rough weather when the boat stays level and is pitching less. Large cockpit spaces keep crew well away from the lifelines as well.

The speed of a multihull is another safety factor, as with decent weather information it's relatively easy to sail around severe weather systems before they can bear down on you. Should something go horribly awry, and the boat get flipped (VERY rare), the lack of ballast, and additional positive flotation, means that nearly every catamaran and trimaran produced in the last few decades will remain on the surface of the water, right side up or not, until a rescue can be made. Nearly all cruising cats and tris have a substantial amount of reserve buoyancy, in the form of closed-cell foam, stashed in the nooks and crannies of the boat. Because of this, most could literally be cut into pieces and all pieces would still float. This makes fire your biggest safety concern aboard a cat. And the anchor windlass, but that's a story for another day.

Motoring Performance/Maneuverability

Cruising catamarans and trimarans, with their easily driven hull forms and light weight, enjoy excellent fuel efficiency when compared to monohulls, and track very straight. Cats almost always have twin engines, set many feet apart, which allow for tremendous control in tight situations. In fact, the boat can be spun in place or crabbed sideways without any way on. Try that on a monohull. Prop walk is minimal or nonexistent as well, and the redundancy of a second engine is appreciated should a mechanical issue arise underway. Nearly all trimarans have just one engine, so the differences there are slight.

Shallow Draft/Beachability

Because multihulls' stability comes from the beam and extra hulls (form stability), there is no need for ballast or a substantial keel. This reduces overall weight and, importantly, draft as well. It is common for a 40+ foot cruising cat to have a draft less than 4 feet, allowing sailors to explore shallow areas monohullers fear to tread. Belize, the Bahamas, the Great Barrier Reef? No problem. Gunkholing around Mexico or the Chesapeake is easier too. If you have some quick underwater maintenance to do (replace prop shaft seals, zincs, a through-hull), most cats can be dried out at low tide on a flat area of sand or solid ground, resting happily on her stubby little keels. You can also nose right up to that perfect beach if the weather allows. Trimarans typically have no keels at all, and instead rely on a centerboard to prevent leeway, making them perfect for beaching (boom tent camping, anyone?).

More Living Space on a Catamaran

No doubt you've already realized the enormous gains in living space afforded by modern cruising cats. Typically a cat will have the space below equivalent to a monohull 10+ feet larger. When combined with added cockpit space, possibly a flybridge, and more than doubling the deck space, it becomes a whole different ball game. It's important to note that you not only gain a tremendous amount of space, but nearly all of that space is very livable and comfortable, whether at anchor or underway.

However, trimarans don't show an increase in interior volume, and in fact tend to be smaller below than monohulls of the same size.



Interior of Corsair 970 Trimaran