



## C-1 Outfitting Selection Guide

### General Information:

At River Elf, we offer our boats for sale with various options regarding outfitting. We utilize á la carte pricing on our website to give you some control of the cost and determine how much additional work you will have left to do once your boat arrives. Use this guide to help you decide which options are right for you.

You can purchase our C-1's "empty" which include only the following essential elements already installed: cockpit rim, grab loops, minicell pillars, carbon pillar guides, carbon bow shock absorber, and security ring. No outfitting is included. This is our cheapest option and essentially leaves you, the buyer, with a "blank canvas" onto which you do all of the parts sourcing, outfitting, and customization yourself.

Our most expensive option is a "fully outfitted" boat. With this selection, you choose from our menu of components and we do all of the outfitting for you. Your boat is **almost** ready to go upon arrival. The only thing left for you to do is to make some minor customizations (adding or subtracting some foam here or there) to get a tight but comfortable custom fit.

Most of our customers choose something in between an “empty” boat and a “fully outfitted” boat. This allows you to choose the parts and installation options that make the most sense to you (from a cost perspective). It also reflects the reality that some outfitting is best left done by the end user to ensure a perfect custom fit to your body. Detailed, step-by-step, installation instructions are available on our website for all of our self-install parts.

One of the advantages of composites over plastic boats is that it is very easy to permanently add outfitting parts, loops, straps, etc. to the inside of your boat without having to drill through the hull. With care and patience, you can quickly become adept at using composite materials and learn to customize your boat in a very sophisticated manner.

Finally, If you are new to composite boats, you may want to revisit your current approach to outfitting and what you consider necessary. Customize your boat to fit ***your*** body. Think about weight minimization. Experiment. Find what works for you.

Use the following guide to help you decide how you will approach your outfitting and which River Elf components are right for you.

## Seat Options:

We offer a foam pedestal seat and a composite pedestal seat as options for our C-1's. Normally, we recommend using a foam seat as it allows more "give" in the hull. Our composite pedestal is better suited for slalom or freestyle boats with very stiff hulls. Our seats are available as uninstalled parts (with instructions for self-install available on our website). We can also do a factory install for you at an additional cost.

We recommend positioning the back stop of your seat 1" from the back inside edge of the cockpit rim for both the S-M and the L-XL versions of the Storm Chaser. This is the ideal position for most paddlers.

We also recommend fitting your seat *into* the stern of the boat, well under the deck, and cutting a notch in it. This will help hold the pillar in place and provide additional vertical support to the deck and hull.

With care, you can shape and curve the foam that lies just under the cockpit rim and stern deck such that the seat and notch walls form a continuous foam column from the hull up to the underside of the deck. This is particularly useful for those who like to sit on their deck when on the shore as it provides additional support to the boat.

Seat height is generally a choice of personal preference. Higher seats offer better comfort and more reach while lower seats provide for improved stability. The Storm Chaser can be outfitted with either. Something in the range of 5-8 inches is typical. Unless otherwise requested, we normally ship factory installed seats at 6". Let us know if you want something different when ordering.



our standard 6" foam pedestal installed

We can also ship the boat without a seat and you can create one using your own foam.

As an example, one of our customers created their own custom seat (shown below) which fits into the boat using friction. Notice how the foam was carefully shaped to create a notch for the pillar and was elaborately curved at the top to fit perfectly under the deck of the Storm Chaser.



photo courtesy Rick Bryan



photo courtesy Rick Bryan

## **Foam Foot Pads:**

Neoprene foam foot pads are available for our boats. These provide insulation and cushioning for the tops of your feet and can be cut and installed to fit flush up against the tapered sides of any of our seats.



## Hip Blocks:

We highly recommend installing a set of hip blocks in your Storm Chaser C-1. Hip blocks help lock you into your boat providing subtle directional control and more powerful forward propulsion. We offer three different styles of hip blocks on our website but our low profile hip blocks generally work best with the Storm Chaser. Instructions are available on our website for those who want to have final say so on installed position and don't mind tackling the job themselves. However, in most cases, proper hip block location is generally a function of seat position and thus can be done as a factory install.

Although rigid, permanently installed, hip blocks impart superior connection and control, those who choose not to add them to their order, might want to consider installing some well crafted foam and/or custom composite supports to achieve a similar feel.



## Securing the Thighs and Knees:

There are a number of ways to secure your thighs and knees inside a C-1 and differ from user to user based on body size and personal preference. Our standard offerings are strap anchors and knee cups.



Although we can do a factory install of your strap anchors, we strongly recommend that you do this job yourself and offer a kit with everything needed. Detailed installation instructions are available on our website.

Our knee cups are generally shipped with squared outside edges. This means that you will have to custom cut/shape the outside wall of each knee cup to fit the inside chine walls of your Storm Chaser. For an additional charge, we will do this prep work for you (note: we aim not to “over carve” the outside walls so it may still be necessary for you to do some final minor customization to seat the knee cups exactly where you want them). Finally, the knee cups must be glued into position by the end user to ensure a correct fit.

We offer detailed installation instructions on our website for prepping the squared knee cups and for final gluing.



example of “prepped” knee cups ready to be installed

**A good rule of thumb to consider when outfitting your Storm Chaser C-1 is to approach it as if you were outfitting an open canoe.**

The Storm Chaser is a high volume C-1 and as such, the cockpit rim sits higher on the boat than in a slalom or other low volume craft. For this reason, most paddlers can't use the cockpit rim to help lock themselves into the boat.

Because of this, some of our customers have opted to use an additional set of straps (or a single three-point strap on each side) to help hold them in when the boat is upside down. Often, 1" straps near the knees are all that's required. This is particularly useful for boats with high seats (greater than 6") or those without hip blocks.

In lieu of knee cups, some of our customers choose to create and install a foam bulkhead with cut outs for the knees and a thin layer of foam on the hull for cushioning. A bulkhead can be used with or without straps depending on setup and preference. At this time, we do not sell a foam bulkhead system though plans are in the works to offer a well designed lightweight alternative in the near future. Contact us to inquire regarding current availability.

Finally, other means of outfitting include fully integrated, seat and bulkhead systems. Both composite and foam versions are often found in modern slalom C-1's but are not offered through our website.

Employing double straps in a knee cup outfitting system:



A beautifully designed and executed customer outfitting system that employs a foam bulkhead. This boat was shipped empty except for factory installed hip blocks.



photo courtesy Rick Bryan



photo courtesy Rick Bryan

## **Stern Shock Absorber:**

Included in all of our boats is a carbon bow shock absorber. The shock absorber serves two purposes. It locks the front of the bow pillar into place and provides a rigid support during extreme impact. The shock absorber is affixed to the underside of the deck and “floats” where it contacts the hull. This allows the hull to flex during minor impact. In the case of extreme impact, the shock absorber will engage fully with the hull surface and transfer the impact energy into the deck providing a rigid support to the boat beyond that available with a minicell pillar alone.



We normally do not include a shock absorber in the stern of our C-1's. A notched seat that fits back into the stern and is carefully crafted to provide continuous contact from the hull surface to the underside of the deck is sufficient to hold the pillar in place. It also provides additional support to the stern during extreme impact. If the seat you intend to use does neither, then you might consider having us add a shock absorber to the stern of your boat.

Our shock absorbers are not available for self-install.