

Directions for Use:

How Much RiverCast For The Job

Measure the length (L) x the average width (W) x the average depth (D).

$L \times W \times D =$ total cubic inches. From the total cubic inches see which RiverCast kit meets your needs. It's advisable to pad your estimate by 10% to ensure that enough material is available.

RiverCast Kit Sizes	Cubic Inches
1.5 Gallon Kit	346

Working Conditions:

RiverCast performs best when the ambient conditions are between 70-80°F. Acclimate the wood substrate and the RiverCast Epoxy 24 hours before use. Cool conditions, below the recommended temperature range, will cause RiverCast to not only cure significantly slower, but the likelihood of entrapping microbubbles is more likely in the finished product. Higher than recommended temperatures could cause RiverCast to cure too rapidly resulting in possible warpage or discoloration. See the Resources tab for additional information

Sealing:

Mix a small batch of RiverCast Epoxy. Using a disposable, natural bristle brush, apply a thin coat of the epoxy to the walls of the void. After 10-15 minutes, brush on another thin coat of RiverCast. Make sure that the interface between the non-stick material and the wood substrate are coated with RiverCast. This creates a seal, preventing the RiverCast from leaking once the large pour is undertaken. Allow the seal coat to cure overnight.

Measuring And Mixing:

Measure 2 parts Resin (Part A) with 1 part Hardener (Part B) into a clean graduated mixing container. RiverCast can be mixed efficiently with a drill and paddle mixer. Avoid spinning the drill up at too high a speed, as this will introduce excessive air to the mixture. It's advisable to also use a paint stick to scrape the sides and bottom occasionally as you mix. Carefully scrape the sides and bottom to prevent unmixed material from spoiling the cast. Unmixed material will not harden sufficiently and remain soft.

You know you're getting close to fully mixed when the mixture has turned from cloudy to clear. Once it's clear, RiverCast generally requires a bit more mixing to fully incorporate the components. After you've mixed a batch, double check to make sure that there is no thick buildup on the sides or the bottom of the container. See mix time chart under the Resources tab.

Filling:

When filling a void, pour RiverCast just to the surface. If multiply batches were mixed, use a paint stick to gently merge them together in the void. Allow it to settle for 5-10 minutes. Then slowly add more material, slightly overfilling. The RiverCast should be domed and proud of the surface. Use only the material that freely pours from the container. Wipe up any epoxy that has spilled out onto the surface, as thin films take extended periods of time to cure.

Within the first 30 minutes check the fill level. If the RiverCast has dropped below the surface, carefully refill to a slightly overfilled level. Additional pours can be done once RiverCast has cured overnight. No sanding is

required between pours within 72 hours. After 72 hours, lightly sand with 220 grit sandpaper before adding more RiverCast.

Surface Preparation For Finishing:

Best results are achieved by allowing RiverCast 7 days to fully cure before sanding and finishing. Sand RiverCast with a hard-sanding block and 120-150 grit sandpaper to flatten the surface to the surrounding wood substrate. A cabinet scraper can also be implemented. Once the epoxy surface is flat with the surrounding substrate, use an orbital or random orbital sander. Sand the wood substrate, blending into the epoxy filled area. Over sanding RiverCast can dish the surface. Occasionally, check the top with a straight edge to gauge progress. Further sanding is dictated by the type of protective finish coating selected. You will note that the RiverCast surface will lose its clarity after sanding. However, once a protective coating is applied, depth and clarity will return. See sanding recommendations below for the appropriate grit selection prior to applying the top coat. Be sure to follow with the correct grit sequence. Skipping grits can result in scratches showing through the top coat.

MirrorCoat and other System Three Epoxies – Sand to 150 grit

Polyurethane- Sand to 220-320 grit

Lacquer- Sand to 320-400 grit

Oil finishes- Sand to 400-600 grit

Top Coats:

Most coatings are compatible with RiverCast, but it's advisable to pretest to ensure that expectations are met. RiverCast can be used in conjunction with all System Three Epoxies and top coats. Like most epoxies, RiverCast can be used for exterior application, but a quality UV top coat is needed to protect from sun exposure. See [System Three Clear Finishing of Outdoor Wood for more details.](#)