We Can Build It - NYAC 2023 Presentation

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**SUMMARY KEYWORDS**

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**SPEAKERS**

Lev Earle, Claire Breitinger

**Lev Earle** 00:00

Alright, everyone. Welcome to our lightning presentation for NYAC 2023: We Can Build It: A Unique Custom Housing for Oversized Unmounted Paintings. I am Lev Earle, I'm the Special Collections Processing Archivist and Preservation Officer for the University of Rochester's Rare Books, Special Collections, & Preservation. I'll be co-presenting today with my wonderful preservation student assistant, Claire Breitinger. Let's get started. In 2022, Rare Books put together a fantastic exhibit in celebration of the 100th anniversary of US women's suffrage and also in honor of Susan B. Anthony's 200th birthday. As part of the exhibit, we commissioned three unique paintings from local mural artist, Brittany Williams, if you haven't seen her work before, definitely check out her website- she's brilliant, and the paintings are stunning.

**Claire Breitinger** 00:59

So in 2020, RBSCP commissioned three paintings by Brittany Williams, all of which are 45 by 60 inches. And when it came time to begin storing these longterm in our archives, we realized that they were all too big to fit in our flat files, as well as too large to be held by any commercially-produced case. Additionally, we couldn't roll the paintings to store them because that would risk damaging the acrylic paint laid onto heavy paper. Because of these issues, we turned to the idea of building our own custom enclosure instead.

**Lev Earle** 01:38

One of the first things that we did when we were looking at how to properly house the paintings was, we turned to James and Patricia Hamm, who are longtime professional conservators we've worked with before, and they suggested this mount structure. Mostly it's a piece of foam core or Gatorboard wrapped in mylar, and then the painting is clipped to the Gatorboard. We use a piece of matboard or thick rag paper between the clip and the painting to prevent further abrasion. The paintings were also clipped along the short side and then hung vertically, with the long sides hanging down to prevent surface friction from them touching each other. But the only problem with this was that it still didn't provide an enclosure for the paintings to be protected from exterior elements, brushing up against them, bumping them, any of that sort of thing. So of course, the only answer was to design one and build it ourselves. So these sketches show the exterior of the box that we designed. The picture on the left is the earliest draft of what the box would have looked like on the outside and the one on the right shows two exploded diagrams of the double-walled case system. So this was two layers of Coroplast with the grain arranged perpendicularly for extra added strength. One of the things we were really worried about with a build this big was that because the planes themselves are so large, they're subject to additional torsion under their own weight. So that was something we needed to address within the structure of the box itself. You can also see the little sort of waving noodles are the straps that we built into the box. So there are actually these parachute buckle straps that hold the whole thing together. The entire thing was designed to use no adhesive and to only use archivally safe materials.

**Claire Breitinger** 03:42

To build our wraparound shell we needed the original dimensions of the back of the case to be a lot larger than the finished dimensions of 50 x 70 x 6" because we were going to take the back and then use a heat gun to bend all of the seams forward so that we didn't have any cut seams or grommets at the corners. We unfortunately could only get Coroplast available in 48 x 96", so we had to Frankenstein together four sheets of Coroplast to make this base of the wraparound shell. And in the photo on the left, you can see we originally did this using painters' tape; we just sort of mocked up the back of the shell using painters' tape to get all four sheets flat. And then from there we grommeted it the outer shell to the inner layer and remove the tape in the final design. The gray pieces on top of the Coroplast in the image on the left are the pieces of the interior shell and we wrapped them in archival frame-backing paper to decrease the amount of ambient static from the Coroplast near the paintings. In the photo on the right, you can see me sitting on the floor with the heat gun, bending the Coroplast sheeting. We used a variety of metal square objects to make sure that our bends were square and as straight as they could be. The style of construction we used, which was bending all of our corners, meant that there were no seams that required any sort of adhesive. Because of the space we were working in and the size of all of the components we were using to build this box, we had to get a little creative and when it came to the actual assembly. So in this one on the left, you're gonna see Lev is kind of underneath one of the tables in our lab. And on the right, I am sitting in the box to drill holes through the two layers of Coroplast for the rivets. We did in fact discover that this was the most effective way to assemble the box, and we got some great photos out of it. The interior and exterior of the box are fastened together using 3/4" wide, 11/32" deep ratchet rivets. These are plastic snap together rivets often used with Coroplast signs. So here in this photo, you can see the two layers assembled with all of their rivets. Something we were very careful about when we were doing this is that there was no overlap of any of the outer layer pieces of Coroplast with each other or any of the inner layer pieces with each other because we wanted to make sure that it was a completely flat surface.

**Lev Earle** 06:46

The key part of the box was how to get the Gatorboard with the paintings clipped to it safely suspended inside though, and this was the most interesting part for me because I got to machine the hanging cleats. This was designed to function a lot like vertical hanging files but needed to be sturdy enough that it would take the weight of the boards and also not rip out of the Coroplast box but also preserve enough space between the paintings that they wouldn't touch each other. So for the cleats, or the brackets, I used a brick of 6" Lucite which was 1.5" deep and I cut two pieces out of this that ended up being each 1.5 x 1.5 x 6". Then I used a router and drill press to machine the shapes into them that we needed, so these are solid pieces- there are no seams. The bolts go through the Lucite, through the two layers of Coroplast, and then they're bolted on the outside. In the video that we'll show you in a little bit you'll see where they poke through the sides, but from here, you can see how the cleats actually support the sides of the box as well. They're not anchored to the back or the front, they're only anchored to the sides. So those front flaps can still open freely without dislodging the cleats. And here you can see with all three boards inserted in place that there's space maintained between them even when the whole case is lying flat, lying down. [ Video begins playing.] So the case is carried by the two straps on the sides which are designed to fit sort of in the crook of your hands, and then if you lock your elbow at your waist, you should be able to carry it around shoulder height. The straps come off first and then we have to loosen the cap bolts on the sides. I sped up so that you didn't have to watch us do that for so long. The lid lifts up. It is kind of a full body operation- we do end up using our feet just because it's pretty big. Both of us can fit in there. So those are the side panels. We'll close it back up. [Long pause.] And then I'll turn it around to show you the cap bolts on the side and how they function. So they're actually holding down the side like the ears from the top of the case, which also helps hold it closed. So they're more than just holding that piece in place. And then under there, you can see the nuts that come through from the back of the Lucite blocks in the interior. Thank you also to Clara Cherney, my other preservation student assistant, for helping me film this silly little video that we did today.

**Claire Breitinger** 10:34

In total, the cost for the components of the external case came to $239.08. And the materials for the interior mounts of the paintings came to $315.37. By far the most expensive component was the Gatorboard, so if you needed to save some money, you could go with a regular 1/2" foamcore. The downside of that being that Gatorboard is a lot stronger. We also ended up ordering a 10-pack of the Coroplast sheeting because that was what we could find at the time, and we because of that have a lot extra, but the cost on this slide just reflects the six sheets that we actually used. All told the build took six or seven days of full work with the two of us, but it would have gone a lot faster if we'd had a big enough space on the ground to lay everything flat out. That was something we struggled with a lot in the lab we were working in. Additionally, now that we've built it once, it would go a lot faster since we have the understanding of how to bend Coroplast with the heat gun and what works and what doesn't. Lev and I are not angry in this photo, it's just the only image of the two of us together and happens to be from a little Wes Anderson Instagram reel that our department did. Feel free to follow us on Instagram- our handle is on the page, as well as Lev's Twitter handle, and feel free to email either of us- our Rochester emails are also on this slide. Thank you all so much for taking the time to listen to our presentation. We hope you found it interesting and look forward to your questions.

**Lev Earle** 12:15

And here are some links for all the materials we used in case anyone's interested.