

Appendix I. Directions for retrofitted cabinets

Summary

Retrofitting the cabinets at the Haggerty Education Center and the Tubb's House demonstrated a realistic way for people and historical societies to help preserve documents at a similar ability as museum-grade cabinets, at a fraction of the cost. However, finding a procedure for installation could be difficult for those who have limited time for research. In actuality, installation is very easy and a short list of materials means it is possible for majority of people.

Materials

Roll of Marvelseal 360 Barrier Film 50 ft.

Ethafoam planks 12W x 24L x 1"D

Double-sided tape -3M 415 Polyester Double-sided Tape (1/2" or 1"D)

Marvelseal tape- Paper Frame Sealing Tape with Release Liner

Scissors

Markers

Ruler

Directions: HEC's metal cabinet

- Have all materials cleared from shelves and cabinet to measure the lengths of the sides and back wall of unit.
- Cut piece of Marvelseal to cover length of sides and back wall together.
 - Cut a second piece if the height of cabinet is greater than the height of the Marvelseal roll. The second piece can go on top of the first.
- Use double-sided tape to tape down around corners to ensure a tight fit.
- Starting from the top down, begin reinserting metal shelves back into tab holders.
 - Using a ruler can help ensure you are putting the shelves into the even level tabs.
 - If you are having difficulty reinserting, use your finger to find the tab and press down for the Marvelseal to outline. Then use a box cutter blade to "expose" the tabs.
 - While reinserting the shelves may be difficult, once in place, the shelves will provide a snug hold and not allow shelves to move.
- Use the Marvelseal tape to patch any tears in the Marvelseal made during the reinstallation of the metal shelving.
- Measure the width and length of the roof and floor of the cabinet.
- Using these measurements, cut and tape the two pieces of Marvelseal to the roof and floor of the cabinet.
- Measure the height and length of the side and back wall in between shelving spaces for Ethafoam.
- Draw/ line out the dimensions onto the Ethafoam piece using a marker and cut using scissors.
 - Measurements do not have to be exact, but should not leave over an inch of gap in Ethafoam.
- Place Ethafoam pieces into spaces on the side and back wall.
 - Tape can be used if it is loose.
- Once all Ethafoam is in place, materials can be placed back in and will help hold the Ethafoam and Marvelseal in place.

Tubb's House's wooden cabinet

The retrofit in the wooden cabinet at the Tubb's house followed a similar process; however, it was a bit simpler due to the lack of additional shelving.

- Have all materials cleared from the cabinet to measure the roof, back wall, and floor of the cabinet.
- Cut Marvelseal to cover the length of the roof, back wall, and floor together.
 - This was done as the height of the Marvelseal roll was the same as the length for back wall's length.
- Use double-sided tape to tape down, starting with the roof in the corners and the middle.
 - Once the tape feels like a tight fit, move to the back wall and finish on the floor as little to no tape should be needed for the floor.
 - If piece was cut too long, it can be folded up and tucked under.
- Measure the height and depth of the sides of the cabinet.
- Using these measurements, cut and tape the two pieces of Marvelseal to the two sides of the cabinet.
- Again, using the measurements for the sides and back wall, trace the dimensions needed to be cut onto Ethafoam planks.
 - If the back wall/sides are too large, use full-size planks and cut other planks to fit into the necessary space.
 - In our installation, we needed to use 4 different sized Ethafoam planks on the back wall.
- Tape down pieces of Ethafoam using double-sided tape.
- Return material into the cabinet to help hold Ethafoam and Marvelseal in place.

Tips

- Take your time throughout installation; especially for first time installation, it can take a bit of time.
 - Install on a day where it can be a priority.
- Do not get frustrated.
 - Working with tape and having to attach large pieces of Marvelseal to the roof and walls can be annoying, but working it out slowly can help.
- Have another person close by in order to help.
 - It is completely possible to retrofit these cabinets on your own; however, an extra set of hands can be useful in certain situations.

Appendix II. Photographs of the retrofitted cabinets

Cabinets before retrofitting



Cabinets with Marvelseal installed

