THE WEATHER CHALLENGE
Ramona Duncan-Huse, senior director of Conservation, Indiana Historical Society

All museums strive to offer the best environment for collection materials, both in storage and while on display. Microclimates are a good option to help maintain relative humidity at a specific level, an especially important task when RH tends to fluctuate during seasonal changes. Historic artifacts can be very sensitive to moisture and especially so during the dry heated atmosphere of our buildings during the winter.

A microclimate is a mounting technique that consists of a sealed package that contains silica gel conditioned to a specific level of humidity. The object is placed inside the sealed package with the conditioned gel, and humidity is safely maintained while on display. ArtSorb is a thin moisture sensitive material that can be cut and used inside sealed cases and frame packages.

1. Cut the Artsorb sheets to the same size as the mount board used inside the frame package and spray them with distilled water.
2. Place the cut sheet inside a humidification chamber with a hygrometer to track humidity levels. A chamber can consist of any sealed container that will allow observation of the hygrometer.

3. A data logger can also be used as the hygrometer and checked until the Artsorb conditions the chamber space to 60%.
4. Prepare the frame package by assembling all the parts – (L to R) the frame, the mount board (with the original and attached window mat), and the backing board.

5. Position the conditioned Artsorb beneath the mount board and top the entire package with a sheet of Mylar. Johnson's Framers Tape II is used to seal the layers and form the package.
6. A well sealed package will maintain RH for 3-4 months. An RH strip can be placed inside the sealed package to help monitor; and the package is ready to be secured in the frame for display. Monitor the RH strip by cutting a small window in the frame's backing board.

Questions about the process can be directed to the IHS conservation lab at: conservation@indianahistory.org.