

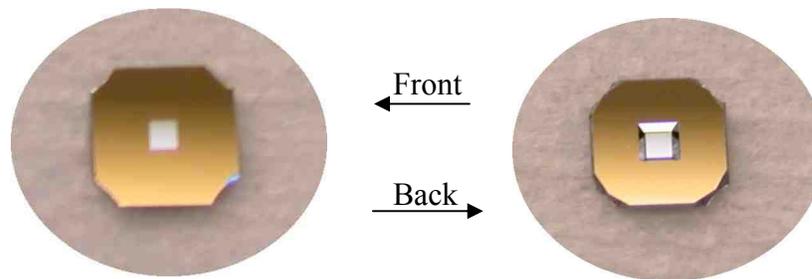


## TIPS FOR HANDLING TEM NITRIDE WINDOWS

**NORCADA'S** TEM nitride membrane windows have been inspected, cleaned, and handled so as to minimize particle contamination and render them organic free. Careful handling upon receipt of **NORCADA'S** TEM windows is important to minimize further contamination. The following recommendations will ensure proper handling of the membranes. Any problems, questions, or concerns can be directed to [info@norcada.com](mailto:info@norcada.com).

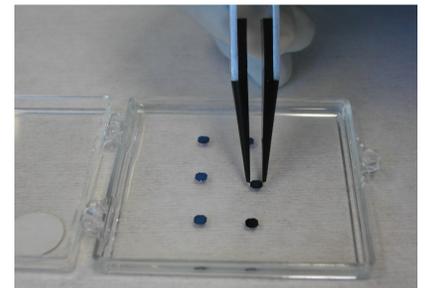
- Always keep membrane surface face up.

If the membrane is placed face-down on a surface, there is a likelihood that the membrane will break or the surface will become contaminated. It is recommended that the membrane be kept face-up at all times. Distinguishing the difference between the etched pit (back) and the membrane (front) is easily done by eye. The difference is illustrated below.



- Handle by the edges of the device whenever possible

Remove the TEM window device from the gel-pack with soft-tip tweezers as shown on right. Apply gentle pressure to grab the two flat edges of the TEM window device with the tweezers first and then rotate the device slightly to dislodge it from the gel-pack. Always place the device with the membrane side up to avoid breakage.



- Work with clean and soft tweezers



Organic contamination and particles can be easily transferred from dirty tweezers to the membranes. Tweezers can be cleaned with IPA and dried with a nitrogen gun. Stainless steel tweezers are not recommended for handling the TEM nitride windows as they can cause fracture and chipping of the silicon frame at the edges which lead to contamination of the device. We recommend the use of plastic tweezers or Carbofib tweezers (such as model 18704 from Aven Tools [www.aventools.com](http://www.aventools.com)) which have softer tips compared with metal tweezers.

- Storage

For storage, the device cartridges should be kept in a dry, cool, and dust free environment to avoid potential damage and minimize contamination.