The VS Elite™ and VS Extreme™ vacuum bags were designed for VeneerSupplies.com using an advanced thermoplastic polyurethane that can withstand pressures exceeding 3,750+ psi and stretch more than 6 times its width and length (based on ASTMD 412 test methods). This polyurethane film has superior resilience, unmatched puncture resistance and is made in the USA.

Each bag is welded on a state-of-the-art custom RF welding machine operating at 7,000 watts and 50 lb/in of pressure. This combination of frequency and clamp strength yields the most durable and airtight seam available.

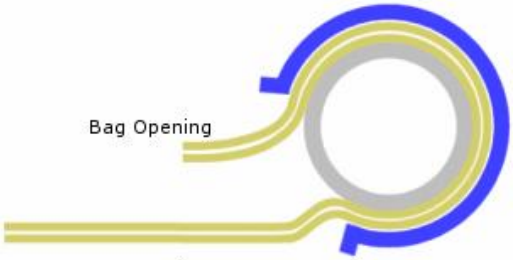
The vacuum bag also includes our new flush-mount bag stem assembly that allows full length use of the vacuum bag without the worry of project surface damage. A specially designed 2.5" diameter 50-mil flange is molded onto the polyurethane stem body and is permanently welded onto each bag.

**Included Items**
VS Elite™ or VS Extreme™ polyurethane vacuum bag, brass stem insert, and bag closure.

**Preparing Your VS Elite/Extreme™ Vacuum Bag**
Unroll the vacuum bag and locate the polyurethane nipple which is located approximately 15 inches inward from the vacuum bag opening. From the top side of the vacuum bag, insert the barbed side of the brass connector into the nipple. You can now connect your vacuum tube to the vacuum bag with our lock-on connector (available at VeneerSupplies.com).

**Using the Bag Closure**
The PVC closure system included with your vacuum bag will allow you to easily seal the bag opening. Simply roll the bag opening over the PVC tube. Then snap the PVC C-channel over the bag starting from one side and working towards the opposite side. To ensure a perfect seal, be certain that the entire bag opening is secured by the closure and that there are no wrinkles in the bag material.

For additional clamping strength, you can attach spring clamps over the C-channel. This is not necessary under normal conditions but it will provide a better seal if the bag is heavily worn. For the ultimate gripping strength, the bag may be rolled over the tube twice before the C-channel is attached. We do not recommend more than a double roll over the tube due to the difficulty of removing the closure under such clamping pressure.



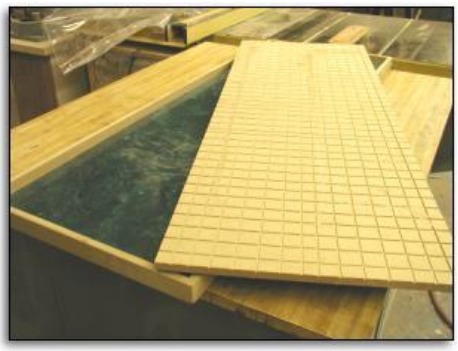
Bag Closure Cross Section

A light coat of car wax applied to the outside of the bag will make it easier to apply the closure.

**Vacuum Bag Maintenance**
Polyurethane is much more resilient than vinyl and with ordinary use, will last for a very long time. You can extend the service life of the vacuum bag by using and storing it carefully. Be sure to round over the protruding edges of anything placed inside the bag including the platen and cauls. When you're finished with the vacuum bag, store it away from direct sunlight and other UV sources such as fluorescent lighting.

In the unlikely event that your bag develops a leak, the easiest way to find it is to place a piece of brown paper in the area where you suspect there is a leak. Then place the platens inside the bag and clamp it shut. Next, turn on the vacuum unit and allow it to achieve as much pressure as possible. Now spray the outside of the bag with water. Any holes in the bag will show up on the paper as the water is absorbed. To repair the leak, contact us for a patch kit.

**Platens and Breather Mesh**



The platen system inside the vacuum bag is what keeps the panel flat while the press is in use. It also allows air to flow out of the vacuum bag to the vacuum source thereby creating evenly distributed pressure inside the bag. You'll need to make 2 platens from ¾" melamine. Or if you have plastic laminate available, you can also use plywood or MDF for the platens (be sure to adhere the laminate to one side of each platen). Either of these two types of platens is ideal for vacuum pressing because it will prevent the veneered panel and any excess adhesive from sticking to the platens.

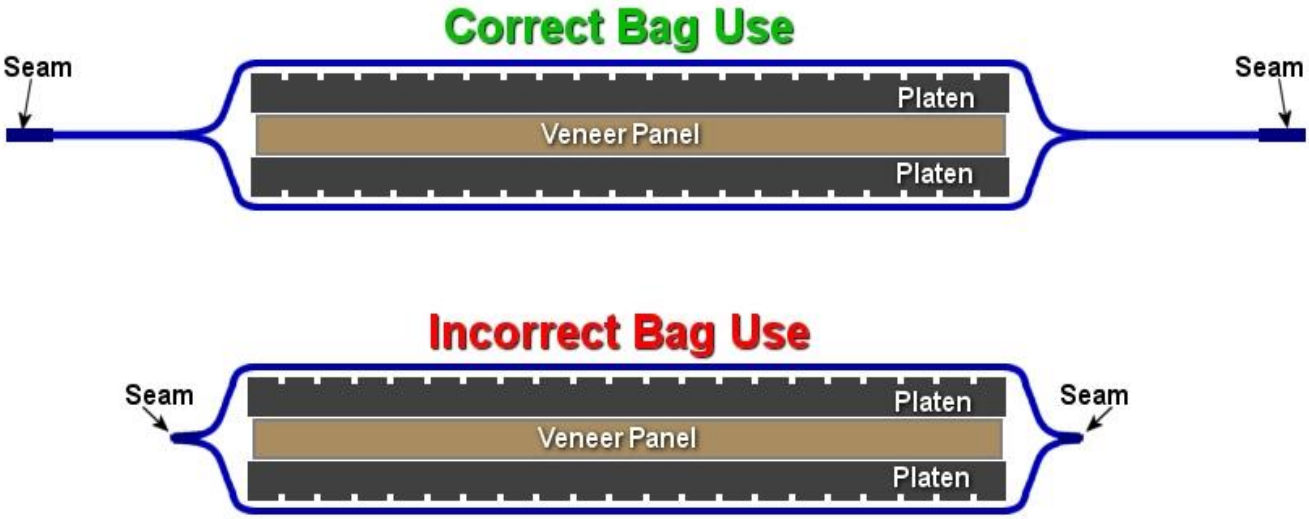
For more information visit www.JoeWoodworker.com/veneering/platenscauls.htm

Breather mesh is an extruded plastic fabric that is used in a vacuum bag to allow air to flow away from the project being pressed and towards the vacuum port (bag stem). It is used in place of a top platen/caul. Without it, the vacuum bag material can seal itself against the veneer causing pockets of air. These pockets have little or no pressure inside and therefore do not provide enough clamping strength for veneer work. Breather mesh allows the even distribution of vacuum inside the bag. This is the key to successful vacuum pressing.

For more information visit www.JoeWoodworker.com/veneering/breather-mesh.htm

**Avoid this Common Mistake**

Be careful that you do not stress the seams on your vacuum bag. The seams will surely break if they are being pulled apart by vacuum. When using an appropriately sized bag, the seams will pull together. Imagine a small project inside a large bag. Under pressure, you would see that the seams actually pull together and are not stressed.




**Making Large Bags More Convenient**

It can be difficult to work with a large project in a large vacuum bag. To make the process easier, you can cut off the seam at the far end of the bag. This will allow unencumbered access to the project panel from both ends. Keep in mind that you will need a second bag closure to seal the end. These are available at VeneerSupplies.com.