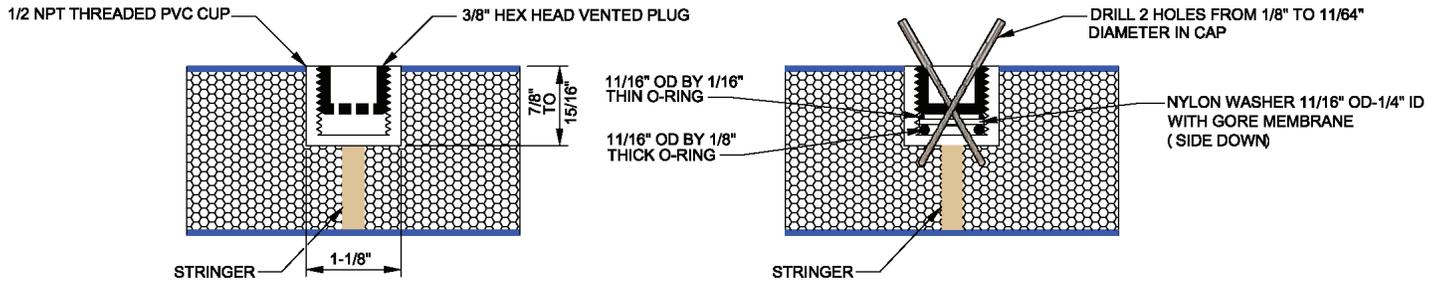


## **Installation Instructions for Membrane Vent Insert**

1. The vent is positioned on the deck, directly on the stringer (or centerline) about  $\frac{1}{4}$  the length of the board from the nose to the tail. Do not locate in the tail area, mid-board or on the tip of the nose.
2. Lightly center punch the hole location. Drill using 1-1/8" diameter Forster bit (preferred), or a hole saw with a very short pilot bit (like for FCS plugs). A 1-1/8 plunge router can also work. The depth of the hole is about 15/16" deep or just enough for the cup to very slightly stick above the glass on the deck.
3. Tape over the open end of the cup to stop any overspill of epoxy from spilling into the cup and on the threads. 100 grit sandpaper the outside of the cup to remove any mold sizing. Acetone can be used but be sure none enters the cup as this can distort the threads in the cup.
4. The 1-1/8 diameter hole allows very little clearance between the insert and the foam, so there is no need for any filler with the epoxy. We recommend 5 minute epoxy to minimize exothermic heating during the curing process.
5. Some prefer at this point to tape over the 1-1/8" hole with 2" tape and then cut the hole open with a single edge razor blade. This allows the excess epoxy to freely ooze up around the top of the insert creating a fillet around the cup. Tape the cup or put a weight on top to hold it down till the epoxy cures.
6. Sand the top of the cup down flush with the deck or the 2" tape.
7. Remove the tape covering the cup opening. Place one 11/16" OD by  $\frac{1}{8}$ " thick O-ring in cup as a guide and drill the venting holes into the EPS core at an angle as per the drawing using a  $\frac{1}{8}$ " to 11/64" drill bit. **Be sure the holes are placed so when the O-ring expands slightly the holes are not covered.**
8. Blow out the cup gently with air removing any plastic or dust particles. Again tape the cup opening for glossing and polishing.
9. After glossing and polishing remove the cover tape and blow out the hole with air.
10. Place the 11/16" OD (thick) O-ring in the bottom of the cup (see drawing) then the Gore membrane with nylon washer side up followed by the thin 11/16" OD O-ring. **Be careful not to touch the membrane as the membrane is delicate and oils from the hand can clog the membrane.** Screw in the  $\frac{1}{2}$ " NPT countersunk vented plug and tighten to 1- $\frac{1}{2}$ " ft-lb or just slightly more than hand tight to compress the O-rings. **Do not over tighten.**

## **Maintenance**

1. Do not wax over the vent.
2. If needed, rinse the vent gently with fresh water to remove sand, etc. from the holes in the countersunk plug.
3. Do not poke anything in the countersunk plug holes. If needed, first remove the plug, clear the holes then replace the plug.
4. Venting the board will significantly reduce the problems with EPS heat expansion, **but it is not an immunization from abuse.** Avoid prolonged heat exposure, use a reflective bag, and do not keep the board in a closed vehicle during high temperatures.



## **W.L. Gore Membrane Vent Specifications Series VE6**

### **Membrane Characteristic**

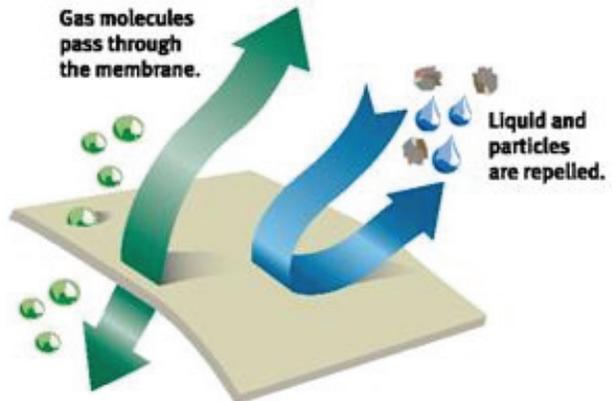
Hydrophobic and Oleophobic  
 Oil Rating 3 (AATCC 188-1997ASTM)  
 Water entry pressure of the membrane  
 >.07 bar/60 sec (10psi/60sec)

Ingress Protection class of the installed VE6  
 IP165-Water Jets  
 IP167-1 meter water submersion for 30 minutes.  
 IP68- Extended water immersion testing.

**Temperature Resistance (DIN IEC 68-2-14)**  
 VE6 vents are designed for service temperature  
 range of -40C to 100C

**Salt Spray Test (DIN EN 150 9227)**  
 No penetration of salt crystals through the  
 membrane into the housing.

**Typical Airflow @ dp=70mbar: 400 ml/min**  
**Series VE6 Airflow 980 ml/min**



**GORE™ PROTECTIVE VENTS  
 EQUALIZE PRESSURE WHILE PROTECTING**