

Sunshine Coast Free Flyers Porosity Meter

aka “Suck-a-Tron”

Purpose:

A porosity meter is used to measure the air permeability of fabric, particularly in paragliders and parachutes. Over time, the fabric of a wing can degrade due to UV exposure, moisture, and general wear, which can lead to increased porosity (i.e., the fabric allows air to pass through more easily).

For paragliders, a porosity test helps determine whether the wing's fabric is still within safe operating limits. If the fabric becomes too porous, it may lose its ability to maintain proper internal pressure, affecting flight characteristics and potentially making the glider unsafe to fly.

In March 2025, **Sunshine Coast Free Flyers purchased a “Hello POROZIT N” Porosity Meter**. We call it “**Suck-a-Tron**”.

Through the purchase of a club porosity meter, members contribute to a safer and more informed flying community.

How it works:


Suck-a-Tron works by measuring how long it takes for a specific volume of air to pass through a given area of fabric under controlled conditions. A longer time indicates lower porosity (good condition), while a shorter time suggests higher porosity (potential degradation).

Regular porosity testing is an important part of glider maintenance, helping pilots decide when to retire or service their wing before performance and safety are compromised.

When buying a second hand wing, one of the biggest concerns is the condition of the fabric, as it directly affects the wing's performance and safety. A porosity test provides objective, measurable data about the fabric's air permeability, enabling the seller to reduce doubts for the buyer, and helping the buyer avoid surprises after purchase, and increase their peace of mind.

To use Suck-a-Tron:

Suck-a-Tron is available to **full club members** to assess the airworthiness of their wings by measuring fabric porosity.

 **Suck-a-Tron** lives at **Dom Colvile's place in Maleny** and must be **used on-site**. He doesn't do house calls, so **please arrange a time with Dom** to visit and test your wing. Dom's contact details can be found on the Contact page of the SCFF website

Usage Guidelines:

☀️ Make sure you are a current member of SCFF [Membership | Sunny Coast Freeflyers](#)

✅ Follow the manufacturer's instructions for accurate readings. <https://porosimeter.hu/faq/>

✅ Watch this video https://youtu.be/9WVGJPYrcwdw?si=nYphZ_cHfYp6xzaN

⚠️ Handle Suck-a-Tron with care to avoid damage - in particular make sure to avoid getting dirt or sand in it. **If your wing has been at the beach, please ensure it is sand free before using the meter**

FYI - The club offers Suck-a-tron as a "self-serve" product. Dom will assist you, but to be clear we're not offering a wing drop off service.

If any issues arise with the device during usage, let Dom know immediately.

👤 Tip 1 - position the meter in direction of airflow to mimic flying conditions ie on the outside surface so the meter is sucking inside to out

👤 Tip 2 - generally the top surface leading edge is considered the most important reading as it's where the greatest lift forces are generated in flight. If wingtips, trailing edge bottom surface have higher porosity, that's less impacting than a leading edge that has developed high porosity

👤 Tip 3 - take photos of each reading with Suck-a-Tron in position as proof for the purchaser if you are selling the wing

Liability Disclaimer:

The SCFF provides the porosity meter as a free resource to members but accepts no liability for any results obtained, decisions made based on those results, or any consequences of equipment failure. Members use the device at their own risk and remain solely responsible for assessing the airworthiness of their gliders. By using the SCFF porosity meter, members acknowledge and accept these terms.