## Hull Breather Tube

Convinced you have a boat that is $100 \%$ watertight?
Bone dry inside 95\% of the time then occasionally you get in more water than you think on a certain day where conditions just don't seem that bad?

A sure fire sign that a boat is watertight is on land on a warm day, when deck patches will expand with hot air inside the hull. This can be easily taken care of with keeping your boat covered and bung patch off as we have mentioned elsewhere. But what happens when we put the boat in much colder water. Look closely and you may notice the air inside your hull has contracted and our once expanding patches, are now looking as though a vacuum has been attached to your hull and it's sucking itself inside out. In extreme cases it is not uncommon for hulls to distort under this pressure.

Now think about this pressure and any hull openings you have and what is happening. Its pretty simple. Water is being sucked into your boat but where? You have found and sealed any leaks but what else? Rudder Tube! Yes that rudder shaft is the culprit in this case and the lower the internal shaft height inside, the worse it is.

Luckily there is a simple solution with a hull breather tube that regulates internal air in extreme conditions. A simple piece of plastic antenna tube of small diameter, epoxied to a plat plate of fibreglass or card, stuck to the underside of a rear deck patch will do the trick. Be sure to place it far enough aft not to risk a sheet tangle.


Above is an example of a breather tube fitted in the rear patch of GBR 42 at the Garda World Championship 2016


Flat water inland sailing at Manor Park in the UK. Warm sunshine on land and cold fresh water create the suction seen above and a bone dry boat into a leaky one.

Cheers
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