How to paint like a professional

HOW TO RECOGNIZE AND TREAT OSMOSIS

THE MAIN SYMPTOM, 'BLISTERS' – Blisters are the most common warning sign and if identified should be followed up with immediate professional examination. Blisters can vary from small pinhead blisters, to areas as large as the palm of a hand. The presence of any fluid behind a blister indicates a potential problem. If the fluid has a pungent, vinegary odor or feels greasy or sticky when rubbed between the thumb and forefinger, there is a high probability of osmosis. Before any treatment is carried out, you need to establish what has caused the problem. We recommend that you seek the advice of a professional surveyor.

Some blisters occur for reasons other than osmosis. They are often evident as a rash of small pinhead blisters or swellings, either locally (often around the waterline) or over the entire underwater area. These blisters are hard and difficult to break and when broken open will be dry, with no odor evident. The likely cause is air voids. This is not a serious problem, but hull moisture levels should be checked before commencement of any remedial treatment.

OTHER WARNING SIGNS TO LOOK FOR ARE –

STAR CRAZING – This effect can occur where the gelcoat is brittle. Fine cracks usually form due to severe flexing or impact damage, allowing water to seep into the laminate.

PINHOLES – Tiny bubbles present in the gelcoat reduce its effectiveness and promote rapid water absorption.

PROMINENT FIBERS – Seen protruding beneath or through the gelcoat and can cause 'wicking' where water is drawn into the hull by capillary action.

UNDERCURING OF THE GELCOAT – Incorrect mixing or application in unsuitable conditions can cause failure to cure properly. This results in porosity and may lead to water ingress.

	IMPORTANT STEPS IN THE REPAIR OF GELCOAT BLISTERS
1	**PROPER PREPARATION OF THE GELCOAT** This includes getting all of the antifouling paint off and removal of as much gelcoat as necessary to get the hull dry (i.e. the entire gelcoat or just small areas). A professional, who has looked at your boat, should make this determination.
2	**DRYING OF THE HULL** This is the most critical step in the process. If you do not get the hull dry it will re-blister. We recommend a comprehensive washing and drying procedure.
3	**APPLICATION OF EPIGLASS® HT9000 RESIN** This solventless epoxy seals up the laminate and fills any cloth that has been voided of resin. This should be done before using fillers to fill the voids.
4	**APPLICATION OF INTERPROTECT® 2000E OR INTERPROTECT® 3000** These epoxies are used as a water barrier to minimize the possibility of reoccurrence of damage.

BEFORE STARTING A GELCOAT PREVENTION OR REPAIR SYSTEM REFER TO THE INTERPROTECT® 900F SYSTEM GUIDE BEFORE STARTING ANY WORK.
CALL 1-800-468-7589 TO OBTAIN A COPY

HOW TO PROTECT AGAINST GELCOAT BLISTERING

Protection is always better than cure and it really does make sense to protect a new boat as well as an older craft. To achieve this protection it is necessary to sheath the hull with a water barrier to seal the surface. This is done over the existing gelcoat. There is no better time to apply an anti-osmosis system than when the boat has not yet been launched. Some boat builders now offer Interlux's InterProtect® treatment as part of their production process, so it is worth finding out if this is the case. However, it must be stressed that protective systems cannot stop osmosis once it has started, or prevent it from occurring in poorly constructed hulls. It is important that a full check is undertaken before starting.

RECOMMENDED OVERCOATING INTERVALS

TEMPERATURES	TIME BETWEEN COATS OF INTERPROTECT® 2000E**		FIRST COATING OF ANTIFOULING	
	MINIMUM***	MAXIMUM	MINIMUM***	MAXIMUM
50°F (10°C)	5 hours	2 weeks	7 hours	9 hours
60°F (15°C)	4 hours	2 weeks	6 hours	8 hours
77°F (25°C)	3 hours	2 weeks	5 hours	7 hours
95°F (35°C)	2 hours	2 weeks	3 hours	5 hours
NUMBER OF COATS*	4/5		1	

*It usually takes 4-5 coats of InterProtect® 2000E/2001E but the final film thickness of 10 mils D.F.T. is more important than the number of coats. See page 28 for amount needed.

**If you exceed the maximum dry times between coats of epoxy you must sand with 80 grit and apply at least one more coat of InterProtect 2000E/2001E to ensure having 10 mils D.F.T.

***Overcoating times will vary due to wide variations in temperature and humidity. The best method to determine when the InterProtect 2000E is Ready-to-Overcoat is to check the paint film using the 'Thumb Print' test. If the InterProtect 2000E feels tacky and you can leave a thumbprint in the paint film without getting any paint on your thumb it is ready for overcoating. Test the paint film 1 hour after starting the application. Continue testing every 15 minutes using the 'Thumb Print' test until reaching the Ready-To-Overcoat stage. Immediately, begin to apply the Interlux® antifouling paint once the primer has reached the Ready-To-Overcoat stage. Do not use this method with Epiglass® Epoxy or InterProtect 3000.
These times do not apply to VC® Offshore or Baltoplate, Micron® Optima or Fiberglass Bottomkote® Aqua.

KEY: Hours ⬬ Weeks ⬭

Typical work schedule for application of InterProtect® 2000E at 70˚F (21˚C)

DAY ONE	
8 A.M.	Give boat final sanding and wipe down
9 A.M.	Apply first coat of InterProtect 2000E
12 NOON	Apply second coat of InterProtect 2000E
3 P.M.	Apply third coat of InterProtect 2000E
DAY TWO	**– Up to 6 months is allowed between coats of InterProtect 2000E**
8 A.M.	Apply fourth coat of InterProtect 2000E
12 NOON	Apply fifth coat of InterProtect 2000E (If needed*)
4 P.M.	Apply first coat of Interlux® antifouling paint

It usually takes 4-5 coats to apply the proper amount of InterProtect® 2000E, but the amount of paint is more important than the number of coats. See page 28 for the amount of InterProtect 2000E needed.