

# Perma-Chink Systems News


## Summer Issue

The Log Home Care and Maintenance Authority

### !!!NEWS BLAST!!!

 **Introduction of New Revolutionary Exterior Stain Lifeline Ultra-2**

 **Lifeline XL is now named Lifeline Advance Gloss!**

 **Introduction of new ready-to-use borate-based wood preservative Shell-Guard RTU**

You'll be happy to know that all Perma-Chink Systems products are **Environmentally Friendly!**

*Enjoy Your Summer!*



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[www.permachink.com](http://www.permachink.com)

## The Systems Approach Exterior Finishes



### ■ The System is Greater than the Sum of its Parts

By Terry Hofrichter

Our experience in formulating stains has taught us some very valuable lessons. We want this experience to be valuable to you as a log home owner. We've learned that the highest performance exterior finish is not just a stain. It is a stain *system* that includes a color coat and a clear coat that work together to get performance that you cannot get with just a stain or just a clear coat.

By "performance" we mean the protection that we expect from an exterior stain and we mean the appearance that you want on your logs. Our exterior stains, **Lifeline Exterior** and **Lifeline Ultra-2**, are very high performance exterior finishes. Our clear coats, **Lifeline Advance Satin or Gloss**, are the most attractive and durable clear coats that we've ever formulated. It is important to understand that these two finish components work together to achieve what either of them cannot achieve alone.

For the ultimate exterior stain system, use two coats of **LIFELINE ULTRA-2** followed by one or two coats of **LIFELINE ADVANCE**. In order to understand how each of these works with the other, read the two articles in this newsletter written by Sean Gahan "*There's a New Exterior Stain in Town!*" and Vince Palmere "*Is a Topcoat Worth the Cost and Effort?*", about these two finish components. These two articles explain how each of the two components improves the performance of the other.



## There's a New Exterior Stain in Town!

### ■ *Lifeline Ultra-2 - Cutting Edge Technology, Unique Exterior Protection*

*By Sean Gahan - Senior Chemist and  
the inventor of Lifeline Ultra-2*

An exterior stain is one of the most critical products that you will apply to your Log Home. First of all the exterior stain enhances the beauty and appearance of the home. Secondly and more importantly, it serves as an environmental barrier from the external elements. In other words, the exterior stain serves as a mechanism to protect your investment from degradation imparted by the wind, rain (or moisture), and UV-radiation. Without this protection, there is a risk of facing frequent and very expensive repairs to restore or replace damaged or rotted wood.

Over the past years we have placed an enormous amount of time and energy into evaluating and comparing competitive products to our existing exterior stain lines, Lifeline EXterior and Lifeline Ultra-1.



Test Panels

These panels were exposed to accelerated weathering conditions for one calendar year. Based on our experiences this time frame equates to approximately 3-4 years of normal external exposure.

This data was used collectively with field testing data (Pictures 1 & 2) and applicator feedback concerning ease of application and finish product appearance to modify and fine tune our new exterior stain formulation.



Picture 1 - Before



Picture 2 - After Applying Lifeline Ultra-2

Perma-Chink Systems is proud to announce the release of our new exterior stain **Lifeline Ultra-2**. This product embraces a series of cutting edge and unique technologies that deliver a superior performance exterior stain system. **Lifeline Ultra-2** offers the following characteristics:

#### 1. Two-coat water-based stain.

Water-based products are becoming more and more popular. This popularity stems from their reduced environmental impact, much lower VOCs and current availability of extremely high performance polymers.

#### 2. Breathable finish.

Water vapor is able to permeate through the film to release moisture from logs.

#### 3. A mechanical resistance to biological growth.

The increased hardness of this flexible polymer network imparts a low tack environment that reduces the potential for foreign matter (i.e. dirt or pollen) to adhere to the surface of the coating and therefore reduces the probability for biological growth. This also makes it much easier to keep clean & maintain.

#### 4. Superior color retention.

**Lifeline Ultra-2** has a supreme ultraviolet (UV) inhibitor package that provides longer lasting color stability and film stability. Couple this with our Lifeline Advance clear topcoat and this system is second to none.

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## 5. Unsurpassed durability.

As mentioned in #3, the increased hardness of this flexible polymer network creates a highly durable finish that is extremely resistant to wind and debris abrasion.



Lifeline Ultra-1, Start of accelerated weathering



Lifeline Ultra-1, After accelerated weathering



Lifeline Ultra-2, Start of accelerated weathering



Lifeline Ultra-2, After accelerated weathering

## 6. Ease of application.

This two-coat stain applies smoothly and easily. The first coat serves as a primer coat and the second serves as the finish coat to produce a uniform beautiful color.

## 7. Water repellency.

A water repellent coating is something that drives away water or prevents the substrate (i.e. wood) from becoming wet. Typically, wood will darken when it becomes wet. Lifeline performs like modern raingear. It repels liquid water but breathes water vapor.

## 8. Longevity.

Results from field and panel testing reveal that Lifeline Ultra-2 will last longer than Lifeline EXterior or Lifeline Ultra-1 and that either outlasts any competitive product.

Early indications with a high degree of certainty are that **Lifeline Ultra-2** will last at least twice as long as our current **Lifeline** exterior stains. This could significantly multiply when coupled with an application of 1-2 coats of **Lifeline Advance** clear topcoat (highly recommended) and a routine annual maintenance program.

**Lifeline Ultra-2** is a unique premium exterior stain. The ultimate goal at Perma-Chink Systems is to provide our customers with the highest quality and performance available anywhere. **Lifeline Ultra-2 with Lifeline Advance** fits this definition very well and is an example of our commitment to our customers. Contact a Perma-Chink Systems' store nearest you to select a color and a free sample. Request a sample of one of our clear topcoats to complete the system and begin finishing your home with the ultimate protection system.



## Is a Topcoat Worth the Cost and Effort?

### ■ *Lifeline Advance Clear Topcoat for Exterior Log Walls*

By Vince Palmere

When talking about stains one question that is frequently put to our customer service representatives is “Is a topcoat really necessary?” Actually a more accurate question would be, “Is a topcoat worth the extra cost and effort to apply?” Rather than giving a simple answer we’ll spend some time discussing the benefits of topcoats and let you decide.

When we examine a *stain* there are certain parameters that govern its formulation.

It must **hold** the pigments in suspension and form a thick enough film for proper color generation and ultraviolet (UV) light protection.

It must be able to **withstand** all types of weather conditions from arctic freezing temperatures to broiling desert heat.

It must **breathe** to allow water vapor to escape from the wood yet prevent liquid water from getting in.

It must remain **elastic** so that it can expand and contract along with the wood.

It must be able to **retain** its color for several years.

**And most importantly**, it must **adhere** tightly to both bare wood and/or a previously applied coat of stain or, in some cases, a topcoat.

That’s a lot to ask of a single coating. In order to satisfy all of these tasks certain trade-offs inevitably must be made. Each affects the ultimate performance of the stain.



Panel with Dark Honey stain, no topcoat. Exposed to accelerated weathering conditions and harsh winds, dirt and sun for one year.



Panel with Dark Honey stain, Lifeline Advance Gloss topcoat. Exposed to accelerated weathering conditions and harsh winds, dirt and sun for one year.

**Clear topcoats**, on the other hand, must meet some of the same parameters such as being breathable, maintaining flexibility and withstanding extreme weather conditions. But they don’t have to hold pigments, retain their color or adhere to bare wood. This enables us to impart a different set of characteristics to topcoats such as film hardness, surface smoothness and a different UV protection system that is not possible in the stain itself.

We used to say that topcoats extend the life of the stain. That is still true, and our new topcoats extend stain life longer than we ever thought possible. And they do much, much more.

First of all they significantly improve the look of the finish. In the past we thought that topcoats should essentially disappear from view. However in the process of formulating our new **Lifeline Advance** topcoat we discovered that we could actually **enhance the color, clarity and depth of the underlying stain finish**.

**Lifeline Advance** is available in high **Gloss** or **Satin** finish.



Lifeline Advance Satin clear topcoat.

Lifeline Advance Gloss clear topcoat.

## Is a Topcoat Worth the Cost and Effort?

*(Continued from page 4)*

The second thing we found with our new **Lifeline Advance** was its **ability to keep the surface clean.**

Since we can design the topcoat to form a slightly harder film than the color coat, it is much more resistant to dirt. This film retains the flexibility and elasticity required of a high-performance log home finish. In addition, the hard smooth surface makes it quite easy to clean off any dust or pollen that may accumulate on the surface of the logs. A simple wash down with Log Wash and a garden hose will remove any grime that may hide the beauty of your home.

Another feature a smooth topcoat **provides is greater resistance to mold, mildew and algae.** In addition to water these organisms need something to grip onto. If the spores land on a hard smooth surface that rapidly sheds water, they won't have an opportunity to germinate and spread. So the surface of the logs stays free of unsightly mold spots and patches of algae.

**Of course the best feature of a topcoat is the protection it provides to the underlying stain color coat.**

Years ago cars left the manufacturer with a coat of paint. More expensive cars may have had several coats of paint but no matter how many coats were applied after a few years the paint job still turned dull and started to fleck off. Then car coating experts discovered the benefits of clear topcoats.

Today's car finishes remain shiny and last longer than ever thought possible all due to the application of a clear topcoat over a color base coat.

We used this same concept and technology for designing our new clear log home topcoat. **Lifeline Advance** helps prevent the color base stain from degrading by protecting the entire finish system from dirt, wind, water and sunlight. So, is a topcoat worth the cost and effort? The decision is yours to make.



Remember, over time the ultraviolet light in sunlight darkens the lignin component of wood thus darkening the appearance of the finish. When added to the first coat of stain, **UV Boost** helps to **prevent the wood beneath the stain from graying.**

UV Boost is a water-based liquid concentrate that is added to the first coat of any **Lifeline** stain. Its new technology retards the photo-oxidation of the lignin, thus retaining the original color of the wood for a longer period of time.

UV Boost is also useful in interior applications to reduce the "picture frame effect." Anyone who has had a picture hanging in one spot for several years has noticed that, over time, the color of the wood behind the picture appears different than the surrounding area. If UV Boost is added to the first coat of interior stain (or Acrylic Gloss or Satin if no stain is used) it will help reduce darkening of exposed interior wood surfaces. Call us for more information.

## Shell-Guard RTU

### ■ Ready-To-Use Wood Preservative

By Vince Palmere



**B**ack in 1988 Perma-Chink Systems, Inc. developed the first borate-based liquid concentrate wood preservative in the country.

With the introduction of **Shell-Guard** in 1995, we made some improvements to the previous product by replacing toxic ethylene glycol with a more user-friendly propylene glycol and making it easier to mix and apply.

For over ten years **Shell-Guard** Concentrate has set the standard for protecting log homes against wood rot, carpenter ants, termites and wood boring beetles. Now we've developed an even more convenient form of Shell-Guard that does not require measuring and mixing before you use it.

**Shell-Guard RTU** is a ready-to-use liquid formulation that contains the same active borate ingredient and glycol carriers that have proven so successful in Shell-Guard Concentrate.

Like **Shell-Guard** Concentrate, **Shell-Guard RTU** is colorless, odorless, has a very low level of toxicity to people and pets and is just as effective for preventing wood decay and insect damage to interior and exterior wood members.

But since it is ready-to-use, you can pour it right out of the container into your pump-up sprayer without the fuss of measuring, mixing and stirring. And if you are not able to complete a job in a single day, don't worry. Just pour any unused product back into its original container, put the cap back on and it's ready to be used the next day, next week or next month.

Besides its convenience of use, another advantage of **Shell-Guard RTU** is its relatively quick drying time. Your logs will be ready to stain within one to three days after a **Shell-Guard RTU** application.

Best of all, like **Shell-Guard** Concentrate an application of **Shell-Guard RTU** is a **PERMANENT** treatment. You will never have to go back and do it again. The unique formulation allows the active borate ingredient to penetrate deep into the wood thus protecting your home from wood destroying insects and decay for years to come.

**Shell-Guard RTU** can be applied with any pump-up garden type sprayer and the application rate is an economical one gallon to 150 to 250 square feet of wood surface area.

**Shell-Guard RTU is available in 1 gallon and 2.5 gallon containers.**



If you would like a referral to an experienced contractor to perform an inspection or to help you with your log home project, contact your nearest Perma-Chink Systems, Inc. location.

## Company Stores

### Washington/Western Division

Redmond, WA 98052  
(425) 885-6050  
1-800-548-1231

### Tennessee/Eastern Division

Knoxville, TN 37914  
(865) 524-7343  
1-800-548-3554

### Tennessee New Store

Sevierville, TN 37862  
(865) 774-3307

### Minnesota Branch

Rice, MN 56367  
(320) 393-3088  
1-877-244-6548

### Colorado Branch

Rifle, CO 81650  
(970) 625-1966  
1-800-433-8781

### Montana Branch

Stevensville, MT 59870  
(406) 642-3544  
1-800-479-7090

[www.permachink.com](http://www.permachink.com)

## Stocking Distributors

**Canadian Log Home Supply,  
Central & Eastern Canada**  
1-800-746-7773  
[www.canadianloghomesupply.com](http://www.canadianloghomesupply.com)

**Hess Log Home Supplies,  
Pennsylvania**  
1-800-257-4864  
[www.hessloghomesupplies.com](http://www.hessloghomesupplies.com)

**Log Home Center,  
Indiana**  
1-800-773-6223  
[www.loghomecenter.com](http://www.loghomecenter.com)

**Steels Industrial Products, Ltd.,  
Western Canada**  
1-877-846-7502  
[www.steels.com](http://www.steels.com)

**Timeless Wood Care Products,  
Michigan**  
1-800-564-2987  
[www.timelesswoodcare.com](http://www.timelesswoodcare.com)

## Affair of The Heart

By Ken Bateson

In a small town, on the original road from Columbia, South Carolina to Augusta, Georgia, is the site of a rather unusual log home. Now, it is not the proportions or physical characteristics of the dwelling that makes it unique. Although, it is very attractive. It is not the setting or scenic view that distinguishes the home. In fact, other than the beauty of the Lifeline Ultra-1 stain and Lifeline Advance top coat on the exterior, it is rather straight forward in design.



As the country was pioneered, it was a frequent occurrence that establishment of a log home on the land to be settled came in steps. First, temporary shelter had to be prepared. Next, the land needed to be cleared prior to planting crops. And finally, trees that were cleared from the land wound up in the construction of a log cabin.

However, the process of building a log cabin required more than materials. It required people, lots of people, from miles around, that were dedicated to helping their fellow man build and secure a homestead. These events were called cabin raisings and the results are at the core of our character as a nation.

Now our story comes together. You see, what is unique about that modest log home located in Lexington, South Carolina that started our story, is how it came about. The log home structure was donated at no cost by Katahdin Cedar Log Homes. In addition, materials of many types, too numerous to mention, came from other manufacturers at no charge. On the first day of construction, ninety workers, all part of Habitat for Humanity, arrived to help their fellow man build and secure a homestead. A true affair of the heart.

For all those that contributed in one way or another, we applaud you. The pioneer spirit may be on the wane but concern for our fellow man is still secure.

## Get a Perma-Chink T-Shirt as a Reward for Information!



**Carpenter bees!** Those of you who live in areas infested with carpenter bees know what a nuisance they can be. What can be done to keep them off of your home?



Well, one of the things we have had reported to us is that carpenter bees do not seem to like wood with a Lifeline XL gloss topcoat. But at this point we just don't know. So we are looking to you for help. If you have had a problem with carpenter bees and have applied Lifeline XL to your home we would like to hear from you. Have carpenter bees drilled through the Lifeline XL topcoat or has the topcoat ended carpenter bee activity? Either way we'd like to know.

As a thank you for responding we'll send you a Perma-Chink Systems T-shirt. Please designate what size (we have mediums to XXL). You will need to supply the following information to qualify for a T-shirt:

1. When was the Lifeline XL topcoat applied to your home?
2. How many coats were applied, one or two?
3. What color stain was used under the topcoat?
4. Did you have a carpenter bee problem in the past?
5. Are you still having a carpenter bee problem in those areas protected by the Lifeline XL topcoat?

We'll also need your name, address and phone number or e-mail address. You can respond by sending an e-mail to [vince@permachink.com](mailto:vince@permachink.com) or by mail to Perma-Chink Systems, Inc, Attn: Vince, 1605 Prosser Road, Knoxville, TN 37914.

We'll let everyone know the results of our survey in the next newsletter.

Summer, 2005

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Issue #2

## Don't Miss Out FREE

### Application Workshops/Seminars

## Summer 2005:



Member of:



- |           |                          |
|-----------|--------------------------|
| May 21    | - Noblesville, Indiana   |
| May 21-22 | - Albany, Vermont        |
| June 11   | - Sevierville, Tennessee |
| June 25   | - Redmond, Washington    |
| July 23   | - Rifle, Colorado        |
| August 27 | - Sevierville, Tennessee |

**Please contact Perma-Chink Systems for more info.**

### Perma-Chink Systems **NEW** Product Catalog

order on line at:

[www.permachink.com](http://www.permachink.com)



**Free samples of many of our products are available upon request. Call your nearest Perma-Chink Systems Store.**