Perma-Chink Systems News

Spring Cleaning

The Log Home Care and Maintenance Authority

Happy St. Patrick's Day!

Special Promotion - FREE Log Wash™

Perma-Chink Systems has developed the best low-pH wood cleaner on the market. We want to help you and your home experience the benefits of using our new *Log Wash*™ for both maintenance cleaning and for wood surface preparation prior to staining.

So between now and June 30, 2008, when you buy at least 15 combined gallons of our *Lifeline Ultra-2* Stain and *Lifeline Advance* Clear Topcoat:

We will give you a FREE GALLON of *Log Wash*™.

(*Lifeline*™ purchases at regular prices – retail customers only)

In today's issue:

www.permachink.com

Get Ready for Spring Cleaning

By Tony Huddleston

Honest Abe Log Home

With winter being almost over and spring almost on us, it's time to get out of the house and see what the ravages of winter have bestowed on your home and do a little spring cleaning.

Spring is also an excellent time to wash your home to remove last year's dirt, pollen and surface mold and mildew. It's not necessary nor should you use any bleach or harsh concentrated cleaners that may damage your finish and create more problems down the road. An excellent cleaner for that purpose is *Log Wash*; as it will remove most forms of dirt and pollen and will help to remove unwanted mold or mildew that may be present on the surface. Plus, it will give you the opportunity to look for any other issues that may have developed during the past year.

Depending where you live, winter can be a very unfriendly companion for your home. For instance; if your home is located in an area prone to large amounts of snowfall, the snow can lay against the logs on your home for weeks. As the snow begins to melt during the day, the runoff water can make it's way into checks and small areas that rainfall normally doesn't get into. Over a period of time the snow melt will eventually work its way into the wood beneath the finish and cause the wood to become very wet.

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Get Ready for Spring Cleaning

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Once the freezing process begins again, the trapped water may re-freeze and expand beneath the finish and can in some instances, "pop" the finish off at the edges of the check. This leaves the wood unprotected along the check edges and can lead to damage from exposure to ultraviolet light and repeated moisture.

The exterior checks that face upward and could catch water should be sealed with *Check Mate 2* to prevent any further water entry. If the edges of the check are unprotected due to loss of finish, lightly sand the area and touch up with the appropriate color of finish and topcoat.

Another problem with upward facing checks that catch water is that they can serve as a channel for water to work its way to the interior of the home. Water carried into the interior of the home not only brings in unwanted moisture, but can also cause unsightly tannin stains or "water stains". These stains can be very difficult to remove, especially if the interior wood is covered with a finish or a sealer. Water stains on unfinished wood can normally be removed with a light scrubbing with a solution of *Oxcon*. If the wood is covered with finish, it is necessary to remove the finish in order to remove the water stains. A word of caution here, never use bleach, as this will not only fail to remove the water stain, it will make the wall "blotchy" in appearance and make it very difficult to make the finish appear even.

Once your home is cleaned, check the log ends for any evidence of darkening that would indicate the presence of prolonged moisture. Water can wick into the end grain of the logs, especially if they are unprotected by overhangs or unfinished. The wicking problem can easily be cured by sanding the log ends to remove any old finish and caulk, as well as any surface deterioration that may be left. If there is moisture present in the ends, allow time for drying and then treat with *Shell-Guard RTU* wood preservative to stop any further progress of rot or decay fungi that may be present. When the *Shell-Guard RTU* has had time to dry, re-stain with the appropriate color.

Once the stain is dry, apply *Log End Seal* to help prevent any further water infiltration. *Log End Seal* is made from two acrylic polymers that remain flexible to absorb log movement from seasonal changes, and provides a clear acrylic barrier to help prevent water entry into the log ends. Also check exterior corners to see if there are any checks present that may funnel water into the corner and seal as needed with *Check Mate 2* to stop any additional water from going inside.

Chinking and sealants should be checked for integrity and adhesion at the interface of the sealant and the wood substrate.

If the seal has broken between the wood and the sealant, it may provide a route for unwanted water entry and heat loss. With sealants there are two modes of failure, adhesive and cohesive. Most adhesive failures are due to improper application over excessive oil, dirt or unsound surfaces. If adhesive failure is apparent, the faulty seal must be corrected by removing the failed sealant, properly cleaning the substrate and re-application following the manufacturer's recommendations.

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Cohesive failure can be observed by evidence of tearing of the sealant with no apparent loss of adhesion. There are a number of reasons for cohesive failures. Thin sealant applications are probably the most common cause, as it may be difficult to determine the depth of the application and while the joint may appear to be sealed, there is not enough mass to absorb movement that may occur. Three-sided adhesion of a sealant is also responsible for a great number of adhesion failures as well. In order for a sealant to work properly, it must be applied in such a manner that allows for movement.

Proper sealant applications dictate the use of a bond breaker that allows the sealant to float at the back side of the applied joint. This allows for the sealant to take full advantage of the elongation built into the sealant if there is substrate movement in joinery. In some cases, it may seem impossible to use a backer rod or bond breaker prior to application of the sealant because the geometry of the joint may not allow. In that case try to over-apply the amount of sealant so that the mass of material applied may help to absorb some substrate movement. You may also use some type of bond breaker tape under the sealant interface if it is not suitable for rod application, but take care to make sure the sealant application completely exceeds the width of the tape and will allow sufficient material on the surface you are sealing.

In the event of extreme movement, even the best sealants may experience cohesive failure and require periodic maintenance. Call and request a copy of our *"Log Home Sealant Applicator Guide"* for a practical explanation of sealant joint design and application.

Technical Tip: Application of Lifeline Interior Finishes

Like applying a finish to any wood surface the first step in an interior application is to make sure the surface is clean. If the home is completed, pressure washing is probably not an option. However there are other methods of surface cleaning that can be used. A combination of sanding with an *Osborn Brush* or surface conditioning disk and washing usually works well. The *Osborn Brush* or conditioning disk will remove most of the mill glaze and surface defects and, after vacuuming up any sawdust, washing with a one cup per gallon *Log Wash* solution will remove the dirt as well as any remaining loose wood particles. A good wipe down with a wet rag or sponge will help get rid of any *Log Wash* residue.

Once the wood is dry, the first coat of finish can be applied. If you want to add some color, one of our *Lifeline Interior* stains is the best choice. Unlike our exterior products, the number of coats you apply is not a critical factor but be sure to add *UV Boost* to the first coat. If after one coat you are satisfied with the color, you don't have to apply another coat of stain. On the other hand, if you only want a clear finish you can start off with a coat of *Prelude* or *Lifeline Interior* Clear with *UV Boost* (*Prelude* already has *UV Boost* in it).

It's at this point that people can make a mistake. Like all water-based products, our interior finishes may raise the grain of bare wood. However, do not attempt to sand either *Lifeline Interior* or *Prelude* since you can end up removing what you just applied. This can result in a blotchy final appearance. If you want a very smooth surface, the best time to sand is after you have applied the first or second coat of *Acrylic Gloss or Satin*. The polymers in our *Acrylic* products are fairly hard which makes the surface easier to smooth. A light sanding with a 120 grit *Osborn Brush* is all that is needed, just enough to remove the high spots and imperfections in the film. Once the surface is smooth, multiple coats of *Acrylic Gloss or Satin* may be applied without sanding between coats.

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Some Things Change...

Improvements and Advancements

By Vince Palmere

Perma-Chink Systems (and its complete line of log home care supplies) is in the business of change. If it were not for change, we would not have high performance coatings to protect the integrity of the wood in your log home. Even worse, you would still be sealing out the weather by using mud and straw mixtures. Over the past few years we have received customer comments about the frequency of changes made to our product line, preparation procedures and application techniques. Many companies within our business are reluctant to change anything unless they are forced to by market conditions or government regulations. They are even more reluctant to communicate product formulation changes to their customers, even though all good companies in this business are constantly revising their product composition.

So what differentiates Perma-Chink Systems from our competition? Our answer is Service and Technology.

Consumers are used to rapid technology changes in the electronic and computer industries. Few people could have anticipated the performance available on cellular phones, digital media and computer software. We are not in the software or electronics business, nor would we want to be. However, we make use of the newest software and hardware to improve our customer service and communications; to maintain and improve our production efficiency; and to enable our research and development to be current with the use of high performance product ingredients.

Perma-Chink Systems is a high technology company in the fields of coatings and sealants. Decades of advances in water-based polymer chemistry have enabled us to develop and manufacture coatings and sealants for log homes that are second to none when it comes to ease of application, appearance and durability. We maintain a close relationship with polymer researchers and manufacturers in order to take advantage of emerging scientific developments. This is what leads to new products such as *Lifeline Advance* Topcoat and *Lifeline Ultra-2*. Even more frequently it allows us to make incremental improvements to existing product formulations without fanfare. At any given time, we have several formulations incorporating new polymer and additive technologies in various stages of development and testing.

We recently expanded our laboratory facility and added significant investments in new apparatus and analytical equipment. This lab is where we maintain our product and manufacturing quality standards as well as perform continuing research and development. This investment will help us to continue set industry standards for high quality log home products. Continued investment in research and development of new products and the improvement of existing products, ensures our future.

Another important endeavor is to constantly explore new and better ways of doing things like preparing wood surfaces for high performance finishes and improving application procedures. Occasionally our research and experience cause us to change our recommendations from what we did in the past. However, we believe that we owe it to you to provide the best and most current information available even if it has changed.

Some things we refuse to change...

Right from its beginning back in 1981 Perma-Chink Systems has been the leader in introducing new technology to the log home industry and we will continue in this leadership role. Our commitment is now and always has been to be the leader in our industry. We are committed to providing the highest level of customer service in our business. We are committed to developing and providing the absolute best products in our industry, at a price that makes the value unbeatable by any bargain, mid-priced or high priced product line from any other supplier. This commitment forces us to hire the smartest people and install the best equipment available to do the job.

Remember that when you purchase something from Perma-Chink Systems you are getting the very best product and the most current information, not something that's been around for who knows how many years without ever being improved. For those who think that new technology is not a good thing, I'd suggest buying a copy of Windows 3.1 and giving it a try.

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Pressure Washing

Proper and Effective Techniques

Jeff Kyger, Northwest Log Home Care

Pressure washing (also referred to power washing) is the function of using highly pressurized water to remove mildew, mold, dirt, pollens, UV graying, etc. You'll hear different recommendations whether or not pressure washing your logs is the best cleansing method. Generally speaking, pressure washing is the quickest and least expensive choice.

A combination of the amount of pressure and amount of water the equipment is designed to use will determine the result, along with other factors. One fallacy is that you're saturating and "damaging" your logs with water as a result of pressure washing. This simply isn't true. On hard, sound, rot-free logs, you're only introducing water into the top fibers of the wood. Your decision should be dependent on the results you want and whether or not your gaps are conducive to allowing water in your home.

If you choose to go with a pressure washing, and your home has numerous gaps that will allow water to infiltrate, foam backing rod (the same product which is used prior to chinking) can easily be used which can be plugged in place before water is introduced. Results will vary tremendously depending on the following conditions:

1. The strength of the pressure used (also known as PSI/ pounds per square inch).
2. The GPM (gallons per minute) the machine discharges.
3. Type and amount of product (previously applied stain/ sealer) being removed.
4. Age of the logs (often relative to surface hardness).
5. Experience of the operator.
6. Angle at which the wall is sprayed.
7. Distance the tip is kept from the wood.
8. Whether a chemical stripper is first applied.

PSI & GPM

Both PSI & GPM are the important factors for the optimum performance when pressure washing. The pressure washer's PSI rating is the maximum amount of force (pressure) discharged by the pressure washer. Pressure washers range from 1,000 psi up to 4,000 psi. A low setting of 1000 - 1500 psi could be sufficient to simply remove minor UV graying that's taken place. However, this isn't enough to remove an existing stain or sealer, in most cases. Something closer to 2500 – 3200 psi, or higher, is necessary on many homes. Often the 3,800 psi setting is reserved for driveways, concrete walkways, etc. although this can be used on logs as well, and with great success; just be careful not to get the tip too close to the wood in order to eliminate any fuzzing. For comparison purposes, a typical household faucet will generally create 40-60 psi. The GPM (the machine's water flow during one minute of operation) is also vitally important.

Product Being Removed

The time it takes to pressure wash and the results generated are often directly associated with the type of finish being removed as well as how many coats have been applied. While some older, obsolete linseed based oil stains are more difficult to remove than newer products, practically everything can be removed with proper pressure washing techniques. Some of these older type products will often need a chemical stripper applied first in order to soften the bond to the wood.

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Flooded in Washington

By Angela Vogel and Kathy Murdock

On December 3, 2007 long-time Perma-Chink customer Tonya Hebert was a victim of the severe flooding in southwestern Washington when the Chehalis River reached levels that hadn't been seen for 500 years. As she swam across her property, horses in tow, towards points higher and drier, she recalled seeing bits of her neighbors' houses floating past her. Despite her own home being covered by 7 ½ feet of water, Tonya had this to say:

"When we were able to assess the damage to our home we were thrilled that it was still intact and even more amazed how the logs repelled water. We attributed this to the Perma-Chink Systems products we used to clean, treat, stain, and seal our home several years prior. We know without it we would not have had the protection our logs needed to endure this 500 year event. Thank you Perma-Chink!"

We would like to thank Tonya for her kind words and confidence. After years of testing and development Perma-Chink is pleased that our system held up under one of the most strenuous tests that nature could throw at a log home.

The Log Home Care & Maintenance Authority

Company Stores

Washington/Western Division
Redmond, WA 98052
(425) 885-6050
1-800-548-1231

Tennessee/Eastern Division
Knoxville, TN 37914
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1-800-548-3554

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Canadian Log Home Supply, Central & Eastern Canada
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www.canadianloghomesupply.com

Hess Log Home Supplies, Pennsylvania
1-800-257-4864
www.hessloghomesupplies.com

Log Home Center, Indiana
1-800-773-6223
www.loghomecenter.com

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1-877-846-7502
www.steels.com

Timeless Wood Care Products, Michigan
1-800-564-2987
www.timelesswoodcare.com

Pressure Washing

Proper and Effective Techniques

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Condition of Wood Surface

Traditionally, newer, recently peeled logs have a greater surface hardness and can withstand highly aggressive pressure washing (if needed) easier than a wall which has been fully exposed to direct sun for 20 years. On older/softer logs, less psi is often used in order to help eliminate any fuzzing of the wood that otherwise can be caused by improper pressure washing. The "effective psi" can be adjusted simply by moving closer or standing back a bit further from the surface.

You might notice your upper and lower fascia boards have aged and darkened at an accelerated rate compared to your logs. Because these areas are often made from softer (i.e. pine) wood, they are more likely to absorb water leading to more prominent mildew growth. These areas are also washed and can easily resemble new wood once cleaned.

Experience of Operator

One key element of this process is the speed (whether slow or fast) at which the tip moves along the wood surface. Take a tremendous amount of care and precautions to leave your logs in the best condition possible. A key element is to always "keep the wand moving". Keeping the tip stationary, or even slowing down too much can leave "fan lines" or marks in the wood left by the water pressure. When conditions are necessary, change the angle at which the pressure washing wand is held and the distance it is held from the log in order to achieve optimum results.

New Construction

Pressure washing of new constructions can also easily remove the UV graying of the logs that can start occurring just weeks after the logs are stacked, particularly if exposed to direct sunlight. The interior of these projects are often pressure washed as well, particularly if the walls are standing for a lengthy period of time prior to the roof being installed. This exposure could cause some mold, mildew as well as UV graying to form, particularly in a damp or humid environment.

Drying Time

Depending on temperature, humidity and the condition of your logs, they can be stained as early as a day after pressure washing. There will be some cases when the stain can be applied the same day they've been pressure washed (but don't rush the process). For this to happen, very high temperatures are needed (usually over 80 degrees). At times a week or more may be necessary to wait. You'll need to wait until the wood is dry enough to accept the stain since excessive moisture can inhibit the saturation of the stain into the wood or its bonding requirements to the wood fibers.

Other Notes

In addition to log and wood sided structures, other areas where pressure washing can be utilized include driveways, stone walkways, pool decking, stone walls, fencing, gutters, downspouts, roofing and other areas. Concrete slowly builds up a browning/green appearance over time which usually consists of grease, dirt, mildew and algae which can easily be cleansed. This is often not so recognizable (until its cleaned) since it builds up slowly over a period of time.

Pressure washing can be done in practically any temperature and weather conditions. Its application isn't isolated to warm, dry conditions as other segments of the restoration process is although chemical strippers, which are often applied prior to cleaning, work much better in warmer weather.

Whether you hire a professional or undertake the project yourself, pressure washing can bring back the beauty of your logs, preparing them for a fresh coat of stain and protective clearcoat finish.

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Don't Miss Out

FREE

Application Workshops/Seminars

Spring 2008

March 29	**Stevensville, Montana**
April 5	**Redmond, Washington**
April 12	**Rifle, Colorado**
April 12	**Knoxville, Tennessee**
April 11-12	**Petersburg, PA**
April 19	**Rice, Minnesota**
May 10	**Knoxville, Tennessee**

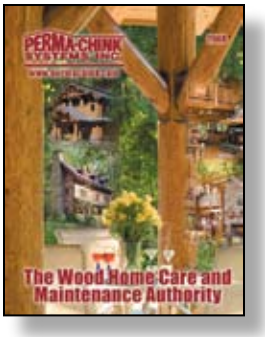
Please check our website for more dates as we update them regularly.

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.

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

WE SPECIALIZE IN ENVIRONMENTALLY FRIENDLY PRODUCTS!

Perma-Chink Systems Free Product Catalog



order on line at:
www.permachink.com

Come See Us at these Log Home Shows

Spring 2008

March 28-30	Toronto, Canada
March 28-30	Portland, OR
April 4-6	Branson, MO
April 11-13	Ottawa, Canada
April 18-20	Harrisburg, PA
May 9-11	Mobile, AL

Visit our website for more information