



HOW TO CARE FOR YOUR LOG HOME

A GUIDE TO MAINTAINING, PROTECTING AND ENJOYING YOUR LOG HOME



PROLOGRESTORATION.COM

TABLE OF CONTENTS

Introduction.....	1
Building a New Log Home	2
Designing a Low-Maintenance Log Home	3
Choosing the Best Wood for your Log Home.....	5
Investing in an Older Log Home	6
Log Home Maintenance Checklist.....	8
Wildfire Protection.....	11
Fixing Water Leaks	13
Thermal Imaging	15
Naming Your Log Home	16
Log Home Décor	16
Holiday Décor	18
Prolog Construction & Restoration	20



HOW TO CARE FOR A LOG HOME

A GUIDE TO MAINTAINING, PROTECTING AND ENJOYING YOUR LOG HOME

From family getaways to full-time homes, rustic and homey log homes are often associated with “getting away from it all” and simple living in an always on the go world. No matter if log homes evoke images from Little House on the Prairie, or flashbacks to camping trips and vacations with friends and family, almost everyone has fond associations with the log cabin culture. During the rough economy of recently years, log home builders experienced a drop in interest from potential



buyers, but recent events and an upturn in the economy have turned people’s thoughts back to these iconic homes.

Here at Prolog Restorations, we’ve seen this first hand, with more and more calls from homeowners who have recently purchased log homes and want expert advice for restoring and maintaining their homes. It’s great to see that these homes are coming back into fashion and people are once again appreciating the natural feel and retro appeal of log homes. Part of this movement back to log homes is most likely a sign of the desire to live more in touch with nature, simplify life, and get back to a feeling of living off the land and being connected to nature.

The history of log homes can be traced back hundreds of years as they were adapted by Americans from Scandinavian design as far back as the 1700s. They were easy to build due to the availability of timber and popular due to their ability to provide secure shelters. In today’s world, log homes continue to be a timeless classic, beloved by owners who use them as full-time homes, vacation getaways, legacy showpieces or modern renditions of a lifestyle that has never truly lost its appeal.





BUILDING A NEW LOG HOME

Building new log homes may sound like fun, and there are many pro's to starting from scratch if you decide to build using today's knowledge and technology, including:

Old world charm with modern convenience: Log cabin home design has come a long way. Unlike the homes you remember from the days of "Little House on the Prairie," today's log homes offer modern convenience and design innovations that combine the best of the old and the new. Vaulted ceilings, grand fireplaces, modern kitchens, central air and heat. These offer comfort and convenience in the rustic setting you've dreamed of, bringing you the best of both worlds, really.

Green living: Home owners are becoming more environmentally conscious and log homes fit into a "green" lifestyle perfectly. Today's builders use logs from sustainable forests, which means the trees are grown specifically for the purpose of being cut down, saving forests that are at risk elsewhere. And all portions of the log are used in the building process, keeping waste to a minimum. Also, don't forget the energy-efficiency factor (keep reading.)

Energy efficient: Due to the thickness of the logs used as building materials, log homes are great at maintaining temperature and conserving energy. They are able to naturally absorb heat during the day, then radiate it at night, keeping the interior at an even temperate and reducing the need for forced heat or air. If you own an older home, replacing old windows with modern Energy Star-rated windows is another way to increase the efficiency of your log home as well.

DESIGNING A LOW-MAINTENANCE LOG HOME

If you are building a new log home, you'll hear lots of talk about the importance of maintenance for ensuring your home stands the test of time. The three things that threaten log homes the most are sun, moisture and wood destroying organisms. Defending your home with large overhangs, porches, regular inspections and proper landscaping will go a long way toward preventing maintenance nightmares.



These tips and tricks for creating a low maintenance log home will help save a vast amount of time, money, and effort, leaving plenty of space to relax and enjoy your home.

Large overhangs or wraparound porches will shield your home from excess sun and rain and extend the life of the finish on your home tenfold. Log homes exposed to direct sunlight require refinishing at least every 3 years. With a porch or large overhang, it can be 15 years before you have to think about refinishing.

If you are choosing a location for building a log structure, avoid areas with high winds, such as on the edge of a canyon. You might have a great view, but the hostile environment will create a higher amount of maintenance issues. If you decide you just have to have that view, consult a log home professional so that they can make design changes that will allow for potential problems and protect your home.

Make sure you use a stain and sealer that is designed specifically for log homes. Logs are different than regular wood because they expand, contract, and don't act like flat lumber. You may pay a little more for the stain, but you'll have to apply it less often, it will protect your logs much better, and save you money in the long run by not having to replace damaged logs that weren't protected from the elements.



Plan your garden and surroundings well by allowing for space around the home for ventilation. Woodpiles stacked against the side of the home, or bushes and trees that brush up against the logs will trap moisture, attract destructive insects and animals, and hide damage until it's too late.

Check your irrigation system to make sure it's not soaking the sides of your home, which will encourage rot to set in. Rot can cause more damage faster than termites can if the conditions are right.

To help prevent wood destroying organisms such as termites and fungi, make sure your logs are Borate treated. Termite and rot causing fungi are the main reasons for log replacement.

And finally, if you want to build the ultimate maintenance-free log home, check out the Montana-based company Everlogs, who produce log-like building materials that are actually made out of concrete. Even the hardest of termites can't munch their way through those!



CHOOSING THE BEST WOOD FOR YOUR LOG HOME

A question that we often hear at Prolog Restorations is something along the line of “What kind of wood is best for log homes?” There is no one correct answer to that question, though, because quality log homes can be built successfully from many different kinds of wood.

To help you make the best choice, we would first ask you a few more questions, including: Where is the home? And what are the environmental conditions? Choosing the right wood to build a log home depends on these factors among others such as desired aesthetics and long-term plans.

There are a lot of options for the wood used to build log structures. In fact, there are at least 80 commercial wood species in the United States and Canada that can be and have been used for log construction. Here are a few of the most commonly used by geographic location:

WEST AND NORTHWEST: red cedar, spruce, fir, ponderosa and lodgepole pine.

EAST AND NORTHEAST: white pine, red pine, white cedar
Southeast: white pine, yellow pine, cypress

CENTRAL: white and yellow pine, white cedar, hardwoods like oak and walnut

Prolog Restorations is based on the West Coast and during our work building and restoring log homes in California, we most often see log structures that are built with Western red cedar, Lodgepole or Ponderosa Pine, and even a few with native redwood.

Wood species have a natural ability to produce toxins that help them resist attack from fungi and insects. The highest concentration of naturally produced toxins is present in the heartwood of each tree. The older the tree, the more concentrated the toxins. Species containing more heartwood than sapwood are more naturally resilient. Cedar, for instance, is valued for its natural resistance to fungi, insect invasion and rot resulting from exposure to the elements – all contributing to a long life, solid construction and inherent beauty that make it popular for log home construction.



INVESTING IN AN OLDER LOG HOME

If you're considering buying an older log home, traditional home inspections usually are helpful for identifying potential trouble spots before you sign on the dotted line. But not all home inspectors have the experience needed for examining log structures.

Log homes, cabins and other log structures such as restaurants, inns, and bed-and-breakfast establishments tend to have unique problems. It takes someone who has specific expertise in log homes to recognize these problems and recommend the correct way to address them.

If you're looking into buying an older log home, here are a few things that you should look for:

1. Check for water marks on interior walls. Leaks will leave noticeable marks on the wood long after they've dried out, helping you to identify where the water is getting in.
2. Take a good look at any interior walls that have covered the logs. Be sure that those sections are closely inspected inside and out by a professional log home inspector. Covered walls may just be an innocent design choice, but they can also indicate a potential problem lurking behind the covering.
3. Give all chinking and caulk a visual inspection and note any areas that are missing chinking or with sloppy caulking. Poor attention to these details can be signs of a lack of care and maintenance.

4. Soft wood is also a sign of potential trouble. Check for soft wood by tapping on the logs with the handle of a screwdriver. Concentrate on areas that are more susceptible to moisture, such as lower logs and areas where there isn't an overhang on the roof to protect it from backsplash. If it sounds hollow, like a ripe watermelon, be sure to note the spot and have your log home inspector take a closer look. For leaks that are hard to pinpoint, a professional log home inspector can also use thermal imaging to zero in on the problem.

5. Check that the foundation is sound, with no big cracks.

6. Check all decks and roof overhangs for signs of mildew, white powder, droppings or other damage from invasive insects such as termites, carpenter ants, carpenter bees and powder post beetles.

7. Sagging or uneven rooflines are also something you should point out to your inspector. This can be indicative of settling wood, structural defects, improper chinking or any other number of problems.

America has hundreds of thousands of log homes, and every one of them presents unique maintenance issues that differ from homes of traditional stick-frame construction. Lack of knowledge about the unique characteristics of a log home all too often results in owners inadvertently doing damage when they try to make repairs. Log homes can last for generations if they are properly cared for. With the help of a log structure expert, you can make an informed decision before investing in that log home or cabin you've been eyeing for your future.





LOG HOME MAINTENANCE CHECKLIST

“I’ve got a log home, now what?!” As the owner of a log home, it’s important to understand the unique needs for care and maintenance for your new home. Log homes are unique – and some of their needs are also unique when compared to “traditional” homes. While it’s always best to consult with professional log home restoration or maintenance experts for anything that falls outside your comfort zone, here is a quick starter guide for caring for your log home.

ANNUAL EXTERIOR CLEANING (WASH YOUR HOME!):

A log home can sometimes be a little bit like a diamond in the rough – beautiful and with lots of potential on the inside, but kind of rough and dirty on the outside. Wear and tear of the logs is a natural thing, but the beauty is always there – it just needs some polishing up on a regular basis to make it shine.

A yearly exterior wash is an essential part of maintaining your log home or structure that will help to extend the life of both the logs and the stains and sealants you’ve applied. Washing removes surface contaminants such as dirt, mold, mildew, cobwebs, pollen and bird droppings that will wear the finish prematurely. Washing also gives you a great opportunity to be proactive in finding any potential problems that need attention like failed caulking or chinking, insect damage or dry rot. If you are thinking of applying a new coat of stain or sealant, washing the cabin beforehand will help the application last longer.

While the thought of “washing” your log home may sound like a fun DIY project, the reality can be a little more challenging.

BASIC WASH: Start first with the basics by using simple log cleaning soap and water. If this treatment cleans



your structure to your satisfaction, great! You won't need to move on to the methods below. If, however, it doesn't give you great results, proceed to a more aggressive method, like pressure washing.

PRESSURE WASHING: Another common exterior cleaning technique is pressure washing. There's no right answer to if this is the method you should use. Factors such as the age, type and condition of the logs should be considered. If you're unsure, check with a professional log cabin maintenance company to steer you the right way. (Like us!) Pressure washing is quick, easy and cost-effective.

Media Blasting uses a variety of materials such as corncob grit, walnut shells, glass beads, baking soda, dry ice or recycled crushed glass to remove mold, mildew, stain and sealants from your logs and prepare them for a new application. While you can try this yourself, we recommend that you have an experienced log home professional who can inspect your log structure beforehand in order to decide the best method and material that will benefit your home.

This is a simple step, and yet the best one for proactively helping hold off many of the issues listed below. Cleaning the exterior of your log home annually with appropriate treatments or a power washer helps negate mold and mildew buildup, deter insects, keep the stain clean and help new applications of protective coatings, stains or chinking last longer. While you can do this yourself, many find it's easier to hire a professional. If you choose to do this, make sure they are experienced with maintenance and care for log homes.

MOLD/MILDEW: Watch for signs of mold and mildew on the exterior of your home that can be caused by excessive moisture. If you catch it early and determine the cause, you can often wipe it out quickly. Some possible causes include sprinklers that spray directly on the logs, leaking gutters (or no gutters at all), splashing from downspouts, landscaping greenery placed too close to the house, and areas with very high humidity.

Address any signs of mold or mildew by adjusting sprinklers or other sources of water that could be the

cause. Be sure to have gutters installed that keep water from running down the logs. Trim back your greenery to give the house at least 18 inches of breathing room. If you don't see any signs of improvement within the next couple of weeks, consult with an expert.

EXTERIOR STAIN: Your logs should be treated with a professional stain that both protects it and makes it look great. Stain can peel, fade and wear off with time and exposure and will need to be reapplied as needed to keep your log cabin protected.

First, be sure to apply stain to logs that have been cleaned with a power washer in order to minimize the potential for peeling and accelerated wear-and-tear. Use only stains that are created specifically for log cabin exteriors. Also, consider protecting your home from UV exposure with strategically-placed shade trees, porches or overhangs.

INSPECT FOR GAPS AND DAMAGED LOGS:

Gaps are a particular concern for younger log homes, especially those that are under five years old, but can occur in any log home no matter its age. These are a result of the wood shrinking and settling over time. While inspecting for gaps between the logs of your home, also keep an eye out for sealant that has worn away as well as signs of decay or damage. Sealants and other protective coatings can be reapplied while damaged logs should be replaced by a log home professional.

The stuff between the logs that fills in the gaps caused by shrinkage or movement is called chinking or caulking. Sometimes you'll see this coming loose or peeling off. This is mostly caused by either the logs not being cleaned before installation, or incorrectly applying it.

You can try to fix it yourself by removing the chinking, cleaning the area thoroughly and then reapplying it. You may need to

install a backer rod, which will help with adhesion and keep the chinking from tearing.

CHECK FOR INSECTS:

Insects can be especially annoying during summer. As you check the exterior of your home, be sure to check for signs of insects making themselves at home. This can include carpenter ants, termites or beetles. Signs can include burrowing holes, small piles of sawdust and seeing the actual insects themselves. Protecting your home or place of business is easier than trying to get rid of the insects, so concentrate on ways to keep them out and minimize damage. If you notice insect entry holes, seal them with a log caulking or energy sealant. It will prevent moisture from entering. If the insects have already nested, insecticides will do well in chasing them away. Check with professionals for the best type of product to use to get rid of these pests, and be sure to let them know what kind of stain or coating your logs have so that any products used don't harm the logs or their protective coating.

TRIM SHRUBS AND TREES NEAR YOUR HOME

During the warmer months, trimming landscaping such as shrubs, bushes, and trees near your home is a must. If bushes or shrubs are too close to the house, they will trap moisture and prevent proper air circulation. In damp conditions, mold will grow on the logs. Excess moisture held in by these shrubs also accelerates the rate at which the logs rot. Plus they limit visibility, making it hard to identify potential problems and deal with them before they cause too much damage.

The key to keeping your log home in good condition is to stick to your list. Walk around the exterior of your log home at least once per season, making a visual inspection and performing maintenance like we've listed above. Take care of your log home and it will take care of you for a long, long time.



WILDFIRE PROTECTION

Another reason landscaping is important is the effect it can have on your log home surviving a wildfire. It's important to maintain your landscape to keep it in fire-resistant condition. That means pruning, weeding, mowing, trimming dead branches and removing dead and dried plants. If water – or the lack thereof – is a perennial issue, consider using non-woody native plants that require little irrigation, and incorporating features like walkways, stone walls and natural stone elements that need little care and actually improve your defensibility.

Did you know that log homes often survive a wildfire, even when the vegetation all around them burns to the ground? There are several reasons for this, but let's start with the most basic. Imagine this: When you start a fire you don't just get a match and a big block of wood and light it up. Fires require kindling before they can get a hole of larger logs. Trees burn really well because they have little branches, needles, and all sorts of kindling built right in. Log homes that are traditionally built using large timbers, as most log homes are, are able to survive wildfires much better. In the rare case that a log home burns to the ground, it's often started from inside the house, where there is lots of kindling and other things to burn that ensure a robust blaze.

Even though your home might survive the fire, if flames were close enough, you most likely will have at least superficial damage to the logs such as blistering and blackening. When we are called to fix the damaged outer logs of the home, we media blast, sand and refinish and retain it. Worst case scenario? If the house is really charred and damaged, log home restoration experts like ourselves can repair or replace the outer half of the logs, leaving your home looking good as new.





FIXING WATER LEAKS

One common issue that every log home will have to deal with at some time or other is air and water leakage – problems that often go hand in hand. Logs naturally expand and contract with the changing seasons, a normal occurrence that over time can lead to cracks that let in air, water and even insect invaders.

Not to mention the challenges of building an air-tight log structure. A modestly sized log home can have several thousand feet of wood-to-wood construction that must be properly installed to minimize air leakage and ensure proper energy efficient performance. Moisture can evaporate out of logs, creating minute cracks. Over time, these tiny cracks can widen more and more, especially as the wood expands and contracts with weather and temperature changes. Not to mention the damage that insects, poor construction and lack of maintenance can do.

If you have a log home, at some point you will probably have to deal with water leaks. Usually the log homes that are affected are ones that are found in extreme weather environments. Rainstorms and melting snow can bring water leaks into a

log cabin that is older or is located on a mountain ridgeline. Homes built where they face the full brunt of what Mother Nature has to offer can experience leaks when heavy winds and “horizontal” rain drive the water into hidden cracks and crevices.

If you notice water leaking into your log home, or see any signs of a water leak such as stains or dampness, be sure to contact a log home professional to help you fix the problem. Meanwhile, there are a few things you can do until help arrives to permanently fix the problem.

First, you need to find the area where the water is getting through. If it’s somewhere in the walls, protect that area from the rain by covering the exterior of the leaky wall with a large sheet of heavy-duty plastic or tarp. Hold the plastic in place using wood cleats and nails to keep it secure in high winds. Remember the goal is to keep out the rain until a professional arrives with a permanent solution.



Water leaks can be as simple as filling in gaps with caulking or repairing the existing chinking. Sometimes the point of entry is difficult to find, but a log home pro can use thermal imaging technology to track it down. If caulking or chinking doesn't work to stop persistent leaks, the log home professionals at Prolog Restorations can fix the problem by building a "waterproof" wall that will guarantee no more leaks.

Prolog Restoration Waterproof Walls have been successfully protecting log homes in high wind environments throughout California for the last several years. A propriety design, these

walls blend seamlessly with a log home's original exterior, and includes a unique water barrier that prevents moisture from entering the home.

If your water leak is in the roof, it will probably take a pro to find the actual area of entry. Decorative cover it, you can ask a log home professional to remove the stain and restore the wood back to its original beauty. Since most water stains are dark, a special technique using bleach must first be applied, followed by a stain to match the original color.

THERMAL IMAGING

Sometimes it's tough to find exactly where air and water are entering your home. In days long past, the best you could do was walk around the room with a candle, using the flickering flame to try and pinpoint where air was coming in and pesky leaks starting. Luckily we've evolved beyond that and now use thermal imaging technology at Prolog Restorations to pinpoint exactly where air and water are getting in so that the problem can be addressed right at the source.

How does thermal imaging work?

Thermal imaging, also called thermography, is the process of using a special camera in a room that can measure differences in air temperature and record and display the results on a laptop or tablet for review. To work properly the room needs to be around 20 degrees warmer or cooler than the outside air for the camera to clearly capture the air flow patterns. Each room that is being tested is sealed as much as possible, with a specialized assembly in the door that effectively pulls air out of the room, thus drawing in outside air from any cracks that are present in the floors, walls or even ceiling. After a typical thermal imaging survey, you receive a report, which may include details of where and how air or water are leaking and how the problem can be corrected.

Once you know the location of problem areas, the job of sealing a log home is greatly simplified. Thermal imaging is an effective way to find leaks that might otherwise have gone unnoticed by everyone – until the next utility bill.

If you've been plagued by invisible air leaks in your home, or have water leaks that you just can't find the source for, thermal imaging technology may be the answer to help your home get warm and safe again.





NAMING YOUR LOG HOME

You love your log cabin – now is the time to name it! Nothing welcomes people in the same way as a creative name on a creative sign for your log home. There are no rules for creating a name for your cabin, so just have fun with it. It can be anything from your family name or local geographical names to something really fun and downright quirky.

Take some time to look at other cabin names to give your creativity a boost. Figure out what you like and what you don't like. When choosing a name, stay true to your style, whether calm and reserved or bubbly and chaotic. Classics like The Anderson Cabin or Mt. Shasta Getaway are always in style.

Or add a little humor to the mix and try out names like The Last Resort, Chateau We-Owe, Grandma's Sanity, and Empty Nest. The land around you may also be your inspiration, with names like Majestic Pines, Three Peaks Overlook, Aspen Ridge, or Eagle's Landing as your choice. If you're still thinking about it, here are a few other partial names you can add to and create your very own: Shack, Shanty, Bluffs, Pass, Ranch, Villa, Place, Station, Quarters, Haven, Mansion, Lodge.

LOG HOME DECOR

What happens inside your log home is as important as outside and furnishing can be a fun adventure. Before you worry that your choices are limited to browns, greens and lot of antlers on the walls, know that there are no rules when it comes to decorating your log home and your best bet is to mix a little of the old with the new while staying true to your personal style.

When it comes to colors, mix it up, but try to use tones that cooperate well with the colors of nature that permeate your home and its surroundings.

Simplicity is best and sticking to a few dramatic "wow" pieces without a lot of clutter will support the feeling of serenity that you love best about your home.

And before you head out to the big design centers, take a walk outdoors around your cabin and look to nature for inspiration and for decorating materials. Flowers, dried grasses and interesting branches, pinecones and more are great for creating DIY decor and bringing the best of nature inside your home for all-day enjoyment.

HOLIDAY DECOR

Log homes and the winter holidays go together like hot cocoa and marshmallows. Whether you live there full-time or use it to escape from the hustle-and-bustle of city life, log homes decorated in their seasonal finery are much beloved symbols of warmth, romance, and tradition.

No matter if you love lots of sparkle – or a few simple touches – you’ve already got the perfect setting when starting with a log home. Here are a few fun ideas, perfect for all tastes and budgets, to help you get started on your log home decor this season.

For those who love nature’s beauty, start with natural accents like pine cones, seasonal fruits, greens, and nature-theme ornaments. Arrange them in glass hurricane lanterns, wooden bowl or birch baskets around your home. An elegant rustic look can also be created by blending classic items such as bark, burlap, twine, Mason jars, and wreaths, with eye-catching sparkle in gold candles, garland, bronze reindeer, rustic bells and twinkle lights.

More modern flair can be achieved by creating a monochromatic wonderland on your fireplace mantle with majestic silver candlesticks, mini trees or wreaths made of white feathers and bleached sea stars grouped cleverly together.



Don’t forget to decorate outside. Highlighting the natural rustic exterior of your log cabin with outdoor-approved twinkle lights on the eaves, forest greenery draped around the doorway, and winter berries tucked in for a bit of bright color is simple to do and easy on your budget. And don’t forget pinecones, a holiday decorating staple that is readily available for homes that are located in or near pine forests.

For lots more decorating ideas, check out our Pinterest account at www.pinterest.com/jacassady. If you have great ideas you’d love to share, send us your pictures – we’d love to see them!



ABOUT THE AUTHOR: PROLOG RESTORATIONS

Hi, my name is Jon Cassaday and I'm the founder of Prolog Restorations, a family-owned business dedicated to preserving and maintaining log homes and structures. For the last 30 years, we've been the go-to resource for professional log home restoration and maintenance services throughout California and we're here to help you if you have any questions about your log home or place of business.

If you're a fan of the reality show "American Dream Builders" with Nate Berkus, you might have seen us in a 2014 episode featuring log cabins. That was certainly fun and we really enjoyed sharing our knowledge with the cast, crew and their audience about the maintenance needs for log structures.

Maintenance is extremely important to keep the beauty and integrity of your home or place of business going strong. We can help you with re-staining, restoring, repairing, refinishing, caulking, weather sealing and other maintenance work. And if you have leaks, we use high-tech thermal imaging to find and fix those leaks.

Nothing is as satisfying to me as helping someone restore the natural beauty and structural integrity of their log home, creating a legacy home that will last for generations.

I've been hearing from customers recently that other companies recommend their older log structures be torn down and rebuilt from scratch. I hate hearing this – especially because it usually isn't true and I am often able to restore their home to its original state for much less money, while saving the home they love.

If you want to talk about your log home or business, or have questions about our services, feel free to reach out to me directly at jon@prologrestorations.com. You can also check out our website at www.prologrestorations.com to see detailed project photos, articles and ideas for log cabin owners – and a blog where we post free information for the care and maintenance of log structures.

No matter what your needs are, Prolog Restorations has the knowledge, hands-on experience and focused expertise to make sure your log structure lasts a long, long time. We are Professionally Certified, Licensed, Bonded, and Insured and our work is 100% satisfaction guaranteed.

Don't hesitate to reach out – we'd love to hear about your log home.




PROLOG
RESTORATIONS INC.

PROLOGRESTORATION.COM