



Karoo Architectural Network

**Restoring and Caring
for Karoo Homes**

The Nama Karoo Foundation encourages you to share this information with anyone who has an interest in Cape and Karoo architectural heritage.

To ensure you receive e-announcements about news, upcoming events and happenings within the Karoo Architectural Network, contact info@namakaroo.org

Nama Karoo Foundation
2nd Edition, 2007
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CARING FOR ATTICS, CEILINGS, AND ROOFS

Attics – Attics are found in older, original portions of homes which had A-Frame, thatch roofs. Many towns were created around one or more farm homesteads with such an attic. The attics were used for drying grapes and other fruit, making biltong, storage, etc. In some attics, you still find branches of certain tree species known to deter lightning still stuck in the rafters – old time lightning conductors, which probably worked as well as modern ones!

On top of the planks (attic floor/living quarters ceilings) was usually a layer of brackish mud about 3-4 centimeters thick. This was built for fire protection, insulation, and to keep the ceiling planks flat and level.

When corrugated iron roofs replaced the thatching, most home owners removed the layer because of the dirt that came through the cracks. The result is that in many homes the planks have curled up at the edges and are uneven without the heavy layer of insulation above them.

Today, the protective layers above planks are wanted again. A new mixture (which includes Styrofoam packing balls bonded with other materials) is apparently being used in home restorations near Paarl.

Ceilings – The older houses have handcrafted, large yellowwood or Oregon pine beams and planks. From the early to mid 1800's (post-Industrial Revolution) wood was worked by machine, and the Oregon pine and yellowwood became thinner and more "perfect." Look under your knotty pine or white board ceilings and you might find a treasure!

Aloe juice was used as a fly repellent but it also preserved the wood. Some people in Graaff-Reinet maintain that the aloe juice was mixed with the blood of an ox or an ostrich. Plain aloe juice looks similar to varnish because it is shiny.

Some rooms, especially those with fireplaces, have very dark brown ceilings. This is often an accumulation of smoke, etc. through the years. Some people choose to clean it with a very mild soap after which it must be well rinsed and followed by an application of Woodoc. Others choose to leave it as is because it helps preserve the wood and is part of the history of the home. It depends on whether you want the new wood look or not.

One of the worst alien plant species in South Africa is Spanish Reed. One square meter of the plant soaks up 3,000 liters of water each day. A good use has been found for them; they make excellent ceilings, resembling the old reed work. It is pricey (about the same as a pine ceiling) but very popular.

Victorian houses often have ornate pressed tin ceilings. These are beautiful and virtually maintenance free – provided the roof is not leaking above them! They are a special and unique feature.

Roofs – Before corrugated iron roofing sheets (late 1800's), the roofing material was mostly thatching grass (collected from vleis), mud/straw and sometimes stone. Many old, flat-roofed houses had very thick wooden beams for ceilings, which supported the heavy layer of mud. After every rain they were checked and another thin layer of mud was added.

Thatching is expensive but restores the authenticity and beauty of the building. Being a natural fiber, it creates natural temperature control and allows the building to breathe. With the degradation of over 90% of South Africa's riverine habitats, natural thatching grass now has to be cultivated and is expensive. Three different grass species are used for thatching, depending on whether you are in a dry or wet region of South Africa. The grass is now treated for fireproofing so it is not as dangerous as it once was, especially if you have a lightning conductor. The better quality the construction, the longer it will last.

The early Karoo style homes (with a façade and a flat roof) do not have highly visible roofs and if the roofing is in good condition, it is advisable to leave it. Keep roofing sheets clean and unpainted so you can harvest your precious rainwater.

Bricks & Mortar (Exteriors)

Houses in the Karoo were built of local materials such as stone and handmade bricks. Sometimes, a cobbling style technique was used as well – a mixture of sand, clay and straw much like that used in Europe.

In the 1900's, builders began using cement and concrete that prevent the breathing and natural temperature control which natural materials provide. The traditional mud plaster of olden days needs less maintenance and is more cost effective.

A few lucky homeowners might find that their home is all of natural stone with only a half or third top section or no section at all with brick. The best thing to do is take off the plaster to expose this stonework and let the building breathe. You might have to "face" the stonework (the in-between-the-stones work). After this, the exterior walls will be virtually maintenance free.

If you have old but stained bricks buried under layers of plaster, you can take the plaster off and use the mud wash recipe (*see under Plaster below*). This is cost-effective and natural looking. Over the years, you can build up the layers of wash and the building will become textured and stronger.

Directionology – If you are doing major renovations to your home, consider making your kitchen and bedroom north- or east-facing. In the winter you get warm sun and in summer you avoid the western rays. Always make sure you have a north-facing warm spot in winter and a cooler, east- or south- facing spot in summer. You want all sun in winter and only east sun in summer. Don't have big trees that block sun to the north – your bigger trees are always better on the south side to protect from freezing winter winds and late afternoon summer sun.

Energy Efficiency – Karoo winters are typified by clear days and frosty nights. Make sure you have one warm room in which to spend your evenings during winter and minimize drafts in your home.

Most houses have charming Victorian coal fireplaces. The simple horseshoe grate and damper typically found in Karoo houses was the sort designed to heat Bob Cratchitt's office with a single lump of coal. Do not be tempted to replace these with a modern Jetmaster fitting; it is the equivalent of replacing a Victorian sash with a picture window. The old ones are repairable. It is advisable to have chimneys swept and their stacks checked every two to three years to ensure against chimney fires.

Working shutters are great to block hot sun in summer and cold night air in winter. They also secure your home. If you don't have them, invest in heavy material for your curtains with lining (to prevent fading) to help keep out the heat and cold. Roman blinds are not a good design for the Karoo, especially if your windows are not 100% sealed.

With South Africa's growing energy crisis (accompanied by rising costs), be smart about the planning of your energy needs. Try to have one geyser that serves both your kitchen and bathroom. Consider putting it in the bathroom for a bit of heat in the winter. One of the most practical energy solutions is a dual-purpose heat/cooking/hot water unit installed in your warm winter room.

Insulate ceilings, floor/wall joins, windows, doors and everything else whenever possible but also remember that lack of air movement in unheated homes makes it feel colder than if your home was sealed tight.

From solar cookers to geysers heated by solar panels, to battery chargers that run your lights and plugs, there is a wide range of great solar products on the market, about which consumers are giving good reports. There are also lots of electrical, energy-saving devices available, such as instant water heaters. If you have a large erf, there are wind-powered energy options as well. You may also choose some of the gas-powered stoves and geysers as an easy and energy-saving option. Gas heaters are perfect to heat a small space quickly and a Cadac makes a portable Karoo microwave.

Floors & Flooring – No historic home enthusiast would advise you to sand and seal the floors. Sand maybe, but certainly don't seal. If the floor has not been varnished, you should clean it with turpentine only and then polish it. The new products available are just that – new! We have no way to tell the impact over 100 years of suffocating the old wood with modern chemicals. Also, sanding floors that

already have uneven planks will severely weaken the wood. Rather leave as is and put rugs with underpadding in areas where the unevenness bothers you.

Shine – You would be surprised what a little bit of elbow grease can do to make your floors shine. Whether it is you or your maid that cleans your house, it's important to know the basics about polishing.

Use Cobra and other wax-based polishes for picking up dirt, rather than coating with a protective, dirt-trapping layer of wax. The secret is less is more AND don't skimp on good quality *lappies* or cleaning cloths (the thicker the better and preferably made of wool or cotton).

The next secret is to go with the grain of the wood. In this way you continuously make the floor shinier and smoother and therefore easier to clean and maintain! A polishing brush is used behind the lappie and this brush must be kept clean. If you have lots of wood floors but don't employ a housekeeper on a full-time basis, a good quality electric floor polisher will be a wise investment to make.

If your floors are very dirty, you can wash them but not with hot water, not with strong soaps and not with stiff brushes. The wood must not get waterlogged and if any cleaning products are used, they must be rinsed off well. You can also put a little Mineral Spirits or Turpentine on a cloth and wipe the boards clean.

In some Victorian to 1950's homes, you might find genuine linoleum flooring. This was made of cork and flax and today is very expensive. It is one of the warmest and longest lasting flooring materials so should be restored rather than removed. Wash linoleum floors with warm water and a tablespoon of paraffin, not with soap.

Older homes in the Karoo are located close to the former Cape Colony and some still have Batavian tiles. This is very special!

Garden – One of the most charming aspects of the Karoo is the idea of the oasis – houses surrounded by flower and vegetable gardens in the middle of apparent desolation. Colonial sentiment and Victorian sentimentality required English gardens to rise up hopefully around their houses.

It is nonsense that colonial gardens restricted themselves to English flowers only. But the simple truth remains that with water, manure, sandy soil and sunshine, these flowers grow beautifully in the winter, spring and autumn. Rust-free hollyhocks, scented violets and magnificent roses, are part of the vocabulary of a Karoo garden, along with rows of vegetables, vineries, etc. Succulent and indigenous gardens have their place, and extend what already grows in the surrounding veld.

Many plants thrive on the north and east walls of buildings. Most places are suitable for grapevines in the Karoo and almost everywhere one can grow stone fruits, figs, mulberries, nuts, etc.

With the increasing trend toward indigenous and water-wise gardening, you probably want to make the most of indigenous plants and trees as far as possible. *Artemisia Africana* (Wildeals), *Sutherlandia frutescence* (Wildcure), *Karoo Acacia*, various other lilies, trees, grasses, flowering bossies and annual plants can all be incorporated into a water-wise and indigenous scheme. Be sure you purchase only from a registered grower and remember that many plants in the Karoo are protected by law.

Try to implement as many water-wise and indigenous gardening methods as possible. Water is the most precious natural resource in South Africa and particularly in the Karoo. The whole of the country has less fresh water than the Mississippi River and this is scary because South Africa is the world's second worst soil erosion offender! The best thing you can do is have stabilizing vegetation cover to trap water and nutrients and PREVENT SOIL EROSION.

Ronel Knaggs of the Drakenstein Foundation has kindly made her "*Ecosystem Gardening*" document available to KAN participants. It is designed for the Karoo. For a free copy, please contact the Nama Karoo Foundation.

Goggas – Fish moths eat wool, silk and paper but not cotton and newspaper. They arrived with musty luggage with the Europeans. One old book advises "making a pint of flour mixed to a thick paste with boiling water and stir in an ounce of white arsenic. Dip pieces of cardboard into this mixture and, when dry, place them where you have seen the fish moths."

Store your winter clothing properly, air/clean your cupboards regularly and don't collect clutter. You can store your winter woollies sprinkled with Epsom Salt and wrapped in newspaper. Whenever you

wash your wool, add a few drops of olive oil to the rinsing water. This will restore whiteness and be a good moth preventative.

Rarely does one have trouble with scorpions and spiders but a clean, uncluttered, well-lit home is the biggest deterrent.

Paint (See Wood Doors and Windows)

Plaster – Most likely, your home will have mud walls which have patches of Pollyfilla, cement and all kinds of “mak-a-plan” hole-plugs! You might even find mielie cobs in your walls. There is absolutely nothing wrong with the natural, breathable mud, unless it is in such a state of disrepair that you need to replaster.

Len Raymond's Exterior Mud Wash Mix:

“Mix 10 wheelbarrows sand with one x 25kg bag builder's lime (mix well together at least one day beforehand, preferably three days). Then mix the water with one more 25kg bag builder's lime with one spade cement. The thinner the mix, the better and the rougher the wall surface is, the stronger it will be in time.”

Security – One of the many great things about the Karoo is its safety. If you want burglar bars, try to put them on the inside so your *huisie* stays charming from the outside. The better option is to have your shutters in good working order (insurance covers break-ins if you use shutters). You can have carpenters make shutters if yours are missing.

Stoops – Quintessential to any Karoo home is your *stoop* or verandah. No two are the same. Some lucky people will find the original stonework underneath a layer of cement. Newer homes often have tiling or a cement surface, sometimes polished with the traditional and very South African red stoop polish.

Style – Cape vernacular treasures, Victorian charmers, early Karoo pieces, Art Deco palaces, Apartheid era mansions – there are many styles of Karoo *huisies*. It's only in the past decade that a more general public appreciation for the materials, historic value and craftsmanship of early buildings of the Karoo has developed. However, older does not mean more special and, technically, anything older than 60 years is protected by law and you need permits to make changes to the exterior.

Just before the mass-produced homes of post-WWII, high quality post-Art Deco homes were built. Many of these are as unique and special as some of the earlier Cape vernacular examples. Some of the most popular homes for modern families to purchase are the grand examples of Apartheid-era architecture. Built as solidly as a bomb shelter in the mid 50's to late 60's, they ensure maintenance-free living until at least 2040!

Most likely, the future treasures built today will be houses built with local, natural materials. The design focus will be on simple living, fuel/resource efficiency and a more holistic architectural approach to the Karoo environment.

Your house might have had as many as four different styles of architecture added on over the past three centuries. There are many different viewpoints about restoring/renovating buildings.

One expert might say, “That 1919 kitchen and balcony added on to the 1842 Cape Dutch portion is part of the home's architectural history and should not be removed.” Another, more purist, expert might say, “The original portion of the home has been suffocated and the intrinsic value ruined because of all the many additions. The home should go back to its original form and become a restored treasure.”

What to do? Firstly, the new laws from SAHRA are clear that you are not allowed to remove any exterior walls (even old hedges of alien vegetation) over 60 years of age without permission. The reality is that Heritage Societies are only just forming in most of the Karoo and there are no informed people in the local municipalities who can assist with heritage issues. There is also little chance that anyone will stop you from restoring. (Luckily, the days when anyone could rip out wood for resale elsewhere are coming to an end.)

Secondly, you need to make a choice between restoring/renovating for authenticity vs. livability. You can have both but restoring a very old building back to its original working form gets very pricey – right down to the hand-forged nails.

Most people already have a certain architectural style preference.

Water – Every part of your design and planning should pay attention to water and energy efficiency. Step one is harvesting your rainwater. This entails having a clean roof, gutters and a rain tank. Grey water from your kitchen and laundry can run out to your trees and garden – your plants will love the phosphates!

Many new water-saving products are on the market. For instance, odorless, stylish, composting toilets that have a simple drawer which gets emptied once a month mean you don't have to build a septic tank.

Whitewash – Whitewash is the best thing for interior and exterior walls. It is the cheapest and most natural – even the colours you mix in are natural and mostly from South Africa! The original interiors were painted soft pink, blue-green or butter yellow.

Windows

Glass – In Europe, the old windows that appear blurry are actually required for a house to keep its authentic value. Though blurry, this heavy leaded glass is more heat efficient than the thinner modern glass made today. Even more special is the old coloured glass, some of which has a wavy texture because the glass was actually poured onto water.

The original windowpanes used by early settlers were nothing more than a thin piece of linen with a beeswax coating.

Style – Sometimes there were square windows in place before sash windows. These add value and charm to your home.

On sash windows, the thinner the middle sections of wood, which hold the lock, the older they are.

Many old windows have been replaced with steel windows, which require less maintenance, are easier to clean and provide unobstructed views.

Wood Doors and Windows – The first thing many new owners want to do when they buy a Karoo home is sand woodwork (often yellow-wood, stinkwood or Oregon pine). Remember, BEFORE you sand, that about ¼ centimeter of the wood is sanded off – this weakens and thins the wood. Ask yourself how the wood will be protected and who is going to oil it and give it all the extra cleaning a raw surface requires?

With few exception, old wood doors and windows, woodwork, fireplaces, etc., exterior and interior, were always painted. If the paint and wood underneath are in good condition, it is best to leave it. For untreated wood, Woodoc products are the best. Linseed oil can be used on exterior wood but a minimum of two coats has to be applied at least twice a year. Linseed, like olive oil, can darken certain woods. North and west facing wood especially should not be left exposed. Never sand if the paint is still good. Paint contained lead so if it has to be removed, take care! Modern varnishes require a lot more maintenance than paint.

Caring for Wood – Wooden surfaces respond to good, hard rubbing with a soft, thick cloth. Oiled furniture needs more constant attention. When new, oil all sides evenly. Borers are less likely to attack oiled wood. Raw linseed oil may be used for the first oiling, and thereafter use a lighter oil every six months. “Elbow grease” is then the secret for a mirror like surface. A good furniture polish for oiled furniture can be made from: 1 cup raw linseed oil, 1 cup turpentine, ½ cup mentholated spirits, ½ cup vinegar and 1 teaspoon ammonia. Shake well.

Newer furniture is often waxed to keep it light in colour. Remember, wax does not nourish and is easily marked with heat and water. A simple wax recipe is: melt ¼ lb. beeswax in 1 pint turpentine. Dissolve 1 oz. soap in 1 pint of hot water. Cool slightly and combine. Mix well.

The backs of wardrobes and chests of drawers and the insides of cupboards should be oiled with paraffin to preserve them.

Rub varnished furniture with a good polish or a little oil. Slightly heated vinegar will remove old polish from furniture. Oak furniture should be washed with warm beer and then polished with furniture cream.

Greasy furniture can be washed with a little borax in lukewarm water or warm soapy water. Dry well and polish.

Miscellaneous home care recipes, hints, etc.

From “*Every Woman’s Household Hints*”, compiled for the National Council of Women by Mrs. E. E. Monro (undated).

Brass and Copper – Rub with a paste made from vinegar and salt. Wash and dry. Dip lemon in salt and rub. Very tarnished brass or copper can be cleaned with a rag dipped in turpentine. You can keep it shiny for longer with a light coat of olive oil.

Porcelain – Small cracks can be mended with clear nail varnish.

Soot – from a chimney can be removed with a mixture of 1 lb. of flowers of sulphur and ½ lb. of powdered saltpeter. Occasionally throw in an ounce or two of this mixture when the fire is burning bright and clear.

Upholstery and Leather Care – Slip-off, washable covers are a good option for the Karoo because of the dust. Leather is the most sanitary option. It can be cleaned with Vaseline to be kept supple and soft. A better mixture is to boil 2/3 cups linseed oil, let it cool almost completely and add 1/3 cup vinegar. Shake well and apply in circular motions with a thick soft cloth. Try to buy leather from game hunted in the Karoo – this helps the local economy and creates jobs.

Silver Polish – Hand rubbing with a good soft cloth or chamois leather is the best way to keep silver in good shape. If you have tarnished silver and an old aluminum pot, you can cover the silver with water and add one teaspoon salt and one teaspoon bicarbonate of soda for each quart of water. Bring to the boil and then put in the silver, covering it completely. Boil two to three minutes until tarnish disappears.

Remove, wash in hot suds, rinse well and buff.

Another method to remove stains and brighten silver is to soak it in water in which potatoes have been boiled and then rub well. Keep a piece of alum or a block of camphor in your silver cupboard to prevent tarnish.

Floor Polish – melt ½ lb. beeswax over hot water. Remove from heat and stir in one pint of turpentine. Stir until mixture is like a thick batter, pour into a jar.

Windows, Mirrors and Picture Glass – become fly-resistant and shiny when cleaned with stale tea.



About Heritage Societies

South African Heritage Resources Association is the national body with which to work. Each province has a provincial department. It is best to make contact with them to find out how to form Heritage Societies and learn about legislation concerning historic homes.

It is advisable that all towns and villages under one municipality work together.

With thanks to:
Pam Golding Karoo - support and sponsorship
Members of the Drakenstein Foundation,
Graham Viney of Graham Viney Design
and Department of Environment & Tourism – input and participation.

Editorial production and design by Pattison Productions