

SAN DIEGO'S GREEN REMODELER



Roof | Solar | Energy Star Windows | Exterior Resurfacing | HVAC

Lic# 1044067

www.ecovisionremodeling.com

EcoVision Remodeling Proudly presents

Roofing 101

A guide to understanding one of the most important
components of your house.



Even though we are a full-service General Contractor remodeling company focused on roofing, exterior resurfacing, Solar, widows, Interior and HVAC, we still get more calls regarding roof issues since it's where we have built our reputation at EcoVision Remodeling. So, let's take a look at those issues that come up the most for homeowners. If you live in the greater San Diego County area, our service records show that these are the 5 most common roofing problems that bring the fear-of or actual leaks:

- 1. Clogged Gutters & Downspouts**
- 2. Deteriorated Pipe Boots**
- 3. Deteriorated Shingles | Torch-Down Membrane**
- 4. Rotten Fascia**
- 5. Defective Product**

Let's take a look at these issues one-by-one:

Clogged Gutters & Downspouts

Debris reacts with water to form sludge in gutters that can reduce the lifespan by overburdening with weight and corrosion. If overflows occur water can penetrate the siding as well. Clogged and overflowing gutters typically need one good windstorm to cause breakages and tear-offs. Simple checks and cleanings in the spring and autumn can make a huge impact. Seeing as how we replace dozens upon dozens of gutters and downspouts in San Diego County every year.

Deteriorated Pipe Boots

A vent pipe boot is a type of roof flashing that consists of a metal or plastic base with a rubber, dome-shaped boot that fits snugly over a plastic vent pipe. The base lies flat against the roof with its top portion covered by the shingles above to shed water. The most common failure with this type of flashing occurs when the boot cracks or peels away from the pipe allowing water to penetrate the roof. The rubber boots deteriorate quicker in areas like Cincinnati due to our annual shift in temperatures along with sun exposure. Replacement is typically easy and inexpensive. We always advise replacing all boots if one fails. Note that a failed boot will always result in a leak as the pipe is always protruding through a hole in the decking for water to run through.

Deteriorated Shingles | Torch-Down Membrane

Where you live has a lot to do with how long your roof lasts. The San Diego County area is in a zone that sees a good deal of windstorms (Santa Ana Winds), hot summers, the roofs in California will see 10 to 20 more years. This is based on the average roof warranty of 40 years for a dimensional asphalt shingle, but the concept applied to other roofing types. Hence, it's wise to use solid products with the longest lifetime warranty available. This is why EcoVision Remodeling gives its clients, free of charge, the Owens Corning 50 year Platinum Warranty on all its shingle roofs & the same on all Polyglass membrane roof. It's the best deal in the roofing biz!

Back to shingle deterioration...

One of the earliest signs of roofing shingle deterioration is the shedding of granules. The granules that coat the surface of the shingle lose their bond naturally with time in the elements. Next, there are signs of cracking and the shedding of corner tips. Also common is the appearance of staining. This can be caused by several factors but what you'll see is a lighter or darker patch or patched resembling drapes. Intense hailstorms will knock off granules and also create pock marks.

Rotten Fascia

The fascia is a lower part of the roof that covers the eaves. The rain gutters are just below the fascia. Built-up debris above the gutter will contribute to a rotten fascia because the area stays wet and rots. A leaking fascia is important to tend to because it can mean that moisture is getting into the eaves. Mold and rot can spread as the constant sun will pull that moisture to the south east of your home where it will start the rot and cause bigger problems. The best time to replace the fascia is when the roof is being replaced.

Product Defects

Asphalt shingles, the most common roofing type in the United States, are the least expensive to manufacture. Because of this, some manufacturers try to find the cheapest components to make their product in order to compete while being profitable. Couple this with the fact that real time testing just isn't there yet and the list of reasons for premature asphalt shingle failure begins to grow. This why we only use the premium shingle by Owens Corning or Polyglass Membrane.

Did you know the type of shingles we see today with fibrous glass mats have only been around since the early 1980s? The three basic components of asphalt shingles are the mat; typically made from fiberglass, the asphalt, and the colored ceramic granules that provide color and invaluable protection from the weather. Some shingles have other invisible additives such as powdered limestone to add weight to the shingles.

What you probably don't know is the asphalt in which the manufacturers use to create shingles comes in several grade levels of quality. Cutting production costs starts here. The chemical properties of the asphalt are vital to a shingle's ability to withstand harsh weather conditions. After all, it's the adhesive that holds everything together. Poor quality asphalt contains a good deal of powdered stone filler that blocks the contact of the granules or weakens the hold.

It's completely normal for shingles to shed their colored ceramic granules. However, it's not normal for it to happen when the shingle's only halfway through its expected lifespan. The

granules on asphalt shingles shield the asphalt and the fiberglass mat from the ultraviolet (UV) rays of the sun. These UV rays will rapidly disintegrate asphalt and the thin fiberglass mat. As shingles age, it's normal for them to become brittle and crack as the oils in the asphalt are slowly released over time due to the heat of the sun.

Poor fiberglass mat design and other mat materials round out the manufacturing defects. Multiple materials have been tried; mostly “green” ones, yet none compare to fiberglass.

Premature Asphalt Shingle Failure via Defective Shingles



How do I Know if I have a Defective Shingle?

EcoVision Remodeling wants you to know exactly what you're dealing with because most people don't know the age of their roof or the brand and series name. How do we do this? Our inspectors know better than most on how to identify a defective shingle and recommend a course of action. The most common scenario is that we look at shingles of an approximate age that have severe cracking or granule loss. Once a sample is taken or a section is upturned, we can be sure as to what the shingle is.

POOR VENTILATION



This bulge is due to the decking being misshapen by moisture and heat over time due to poor ventilation. Windstorms have lifted and damages the shingles further.

The lifespan of a roof is directly correlated to its underside. Poor roof ventilation means that moisture and heat in attic spaces are not allowed to expel to the exterior. This elevated moisture under the shingles can cause the baseboard/decking under shingles to move more than it should, leading to premature failure. Weakened nail hold, air pockets, and swollen surface areas affect shingles where they are most vulnerable – in those areas you can't see.

Premature Asphalt Shingle Failure via Poor Ventilation



Poor ventilation has several obvious signs but the one that is the most dangerous to humans is the growth of mold... in particular, black mold. Proper ventilation will clear up the problem quickly.

Poor ventilation has several obvious signs but the one that is the most dangerous to humans is the growth of mold... in particular, black mold. Proper ventilation will clear up the problem quickly.

THERMAL SHOCK

This issue relates right back to product defect most of the time but is also the deathblow to all older shingles. Thermal shock happens in areas like San Diego that experience wide-ranging temperatures and quick temperature changes (overnight lows that drop due to the dry coastal desert climate) of between 20 to 30 degree Fahrenheit daily. Asphalt shingles can be victims of thermal shock countless times during their lifespan. On a blisteringly hot summer day, the temperature of asphalt shingles can approach 150+ degrees Fahrenheit. The thermal expansion and contraction will lead to granule loss and cracking over time. Older shingles lose their elasticity to cope with this because oils are released via solar heat through the years; brittle things tend to crack a lot when stressed. Now add high winds and thermal shocked shingles are done for.

FILTH

Keeping a roof clean and free of overhanging tree branches will extend the life of shingles. Heavily shaded roofs, in moist climates, age prematurely should moss and algae get a foothold. Should leaves and debris build up anywhere in the shade there will be a food source to get gunk growing. Algae, moss, and lichens are bad because they have roots that go under shingles and eventually lift them – especially when the roots swell with fresh rainwater. Take a look at your southwest corner of your house. In San Diego that is where you get approximately 6.5 hours of sunlight daily (one of the highest thermal sunshine zones in the country and why Solar is so popular here) That is where all your moisture goes and it brings all that it runs into mold, mildew rot in that direction.

MOTHER NATURE

This is all no brainer stuff. Sustained high winds, excessive sun and falling trees or branches will take out shingles prematurely. Add in defective or older shingles to the mix and Mother Nature will devastate a roof every time.

Your roof is the first line of defense for your home, yet it is one of the most overlooked parts of the house until it's too late. Getting a free inspection with a consultation where the technician shares photos of issues is a great place to start!

LET US EMPOWER YOUR OBSERVATION SKILLS BEFORE CALLING FOR A ROOF INSPECTION!

Here are some great ways for anyone to stay planted on the ground and note key issues with their asphalt shingled roof that warrant a call to a reputable roofing company like EcoVision Remodeling:

Trust your eyes and save your wallet.

- Fragments or strips of shingles are the easiest thing to find lying on the ground. If it's your color assume it's from your roof. These things are heavy and generally don't travel too far. High winds and pounding hail can tear away at your shingles especially on roofs over five years old.
- Dangling strips or missing patches are easy to note but pretty rare for newer roofs, 6 years or newer. However, one should take note of the ridge lines. A whole line could go missing and you may not even notice. It's a good idea to take photos of your roof to compare to at a later date.
- If you happen to notice that your shingles are changing tone in a pattern you may have a defective shingle. These may look sound, but they will start to go fast. The pattern may not just be tone; it may also look like every other shingle has a different

texture/coarseness. Should you happen to touch one, try bending it upwards. If it doesn't want to bend because it's brittle, then you're looking at a potentially big problem.

- A very steep sloped rooftop may give you a view of damage you can inspect yourself. Should you observe dark specks, larger than pebbles, and in random spots you may have hail damage. It often appears fairly benign, but it is one of the leading causes of roofing system failure. You want a proper roof inspection by a pro like EcoVision.

Most damages need you at eye level and not every face will have issues. Because roofs are fragile, and your life is valuable it is recommended that even the cleverest DIY pro sit this one out. A real exam should be conducted by an experienced professional that knows how to diagnose roof damage and look at an entire roofing system rather than just the shingle product.

Call EcoVision Today at 858.880.8650 Your neighbors are our references and we proudly serve our community because it is where we live also.

**Want a free Inspection with no obligation either 858.880.8650
or**

[Click this link and set the time you want us to provide this important service.](#)

SAN DIEGO'S GREEN REMODELER



Roof | Solar | Energy Star Windows | Exterior Resurfacing | HVAC

Lic# 1044067

www.ecovisionremodeling.com

Roofs recently completed



3593 Herman Ave North Park— A Roof is like a box of Chocolates, you never know what you'll find till you open them up



3569 Boundary

| 2148 Dale St |

2450 Dulzura Ave

All ready to give a reference should you want one

EcoVision Remodeling, LLC | Lic# 1044067 | 858.880.8650
www.ecovisionremodeling.com