

# New Roof? NO WAY.



Reverse damage and refresh your roof with Peak 301, the all-natural, do-it-all solution that extends the life of roof shingles. One application will add at least six years to your roof and is proven to work better than other shingle rejuvenators on the market.

### 

### → Expensive

According to Homeadvisor.com, the average roof replacement can cost anywhere from \$8,000 to \$10,000.

#### Adds waste & toxins to environment

Excessive replacements consume raw materials, leading to an increase in our carbon footprint. The removal of old roofing systems adds tons of bulky waste to landfills.

### → Disruptive

Creates major messes and non-stop noise.

#### → Affordable alternative

- Pay less than 15% of what you would have paid for a whole new roof, saving an average of \$7,650.
- → Gives you more years than other Rejuvenator brands and products
- → 96% USDA biobased product (higher than any other brand)
- → Average treatments only take 1 to 2 hours
- → All-natural, non-toxic, sustainable solution
- → Industry-leading six-year warranty

### Not convinced yet? Then let's dive deeper into Peak 301...



# BUT FIRST... LET'S TALK ABOUT ROOFS

# WHY ROOF MAINTENANCE IS SO IMPORTANT

Just as regular check-ups are important for your health, and oil changes are necessary for your vehicle, preventative maintenance is just as essential for your home's roof. *Why?* Your roof is the most <u>structurally</u> <u>important</u> part of your home as it protects EVERYTHING inside your home. <u>WITHOUT A SOLID ROOF, IT ALL EVENTUALLY CRUMBLES.</u>

### → Provides structural support

Think of your roof as the backbone to your home; it sets the foundation for every other part and keeps it all together. When part or all of your roof fails, your entire home suffers the consequences.

#### → Provides insulation for your home

- A good roof keeps your energy bills minimalized by acting as a barrier to the outside elements.
- It keeps your rooms warm during the winter and cool during the summer by preventing air from getting in or out of your home. If you have leaks in your roof, you'll probably notice that your energy bills go up in a significant way.

#### → Raises the value of your home

The roof is usually the first thing that people notice when they are looking at it. If you sell your home, having an aesthetically pleasing roof is one way to get the maximum value out of the sale. If you've ever seen a home with a deteriorating roof, you know that it can have a dramatic impact on the overall appearance of a home. Keeping your roof in good shape AND looking good will pay off down the road.



### **DID YOU KNOW?**

ROOF SHINGLES CAN START LOSING GRANULES AS EARLY AS SIX MONTHS AFTER INSTALLATION. THE SOONER YOU SLOW DOWN THE LOSS, THE LONGER YOUR ROOF WILL LAST.

### WHAT HAPPENS WHEN YOUR ROOF FAILS



Even before roof replacement, failings can create a plethora of of budget-destroying, headache-inducing issues inside your home, such as:

#### → Leaks

A failing roof always results in leaks, which are a major problem. When a roof erodes water inevitably enters, creating many additional problems, including ruining wood and drywall.

#### Mold Growth

Moisture in a home leads to the growth of mold spores. Leaking water can quickly lead to a mold-infested room within a home. The care and clean-up can seem like a never-ending task.

#### Water Damage

Water damage can be a devastating result of roof failure. It can affect the main components of your home, including wood framing, drywall, wood flooring, carpeting, furniture, and personal items.

#### Clogged Gutters

While clogged gutters may sound like a back-burner concern of home ownership, it can be very serious and can lead to many issues, including water running down the side of your home, where mortar and erosion can occur, and can even lead to foundational problems.



### THE REAL TRUTH BEHIND YOUR ROOF

### WHY ASPHALT FAILS

### WHAT ROOFING MANUFACTURERS DON'T WANT YOU TO KNOW:

The overall asphalt shingle quality has been declining in the roofing industry over the last twenty years. As manufacturers cut costs, less asphalt is used to create new shingles. This reduction of asphalt leads to low waterproofing protection which allows the manufacturers to sell more shingles through replacements. These lower quality shingles are more apparent as newer roofs need more shingle repairs than roofs that were made in the '90s. Roofs that used to last twenty to thirty years now begin to fail as early as year **EIGHT**. SHINGLES MANUFACTURED IN 1999



SHINGLES MANUFACTURED IN 2019

SAME NUMBER OF SHINGLES SAME MANUFACTURER



#### **HEAT EXPANSION**





THERMAL CRACKING

# YOUR ROOF WORKS FOR YOU 24/7

### IT DESERVES THE CARE AND MAINTENANCE THE REST OF YOUR HOME IS GIVEN.

Your roof expands and contracts every single day, even within a given hour, and flexibility is critical for its performance. An older roof starts to fail as the petrochemicals dry out, causing the shingles waterproofing asphalt to become brittle and lose flexibility and their top protective layers of granules. And because shingles in recent decades include **less** asphalt, they are drying out and failing faster than ever before.

As your roof starts to fail, you may see the granules flaking off in your gutters or downspouts. You might also notice black stains and streaks or shingles cracking, breaking and curling.



# ALL ABOUT PEAK 301

LET'S GO BACK TO THE BEGINNING, BECAUSE A FRESH START FOR YOUR ROOF ACTUALLY BEGINS SOMEWHERE IN THE MIDWEST...

### **AT A SOYBEAN FIELD**



### FROM FARM TO ROOFTOP

### LET'S GET BACK TO NATURE

USDA CERTIFIED BIOBASED PRODUCT

# Peak 301 is all-natural, non-toxic and sustainable in every sense of the word.

Basically, what goes on your roof is also going to wash off into your yard. And a product made from plants – like Peak 301 or good old-fashioned olive oil – is made to be harmless when it drips into your garden or gets sniffed by your dog.

The breakthrough behind Peak 301's formula was discovered and developed at lowa State University, as a new use for the state's soybeans. From there, a specialized R&D team engineered the anti-aging technology to bring homeowners a long **OVERDUE** alternative to roof replacement.

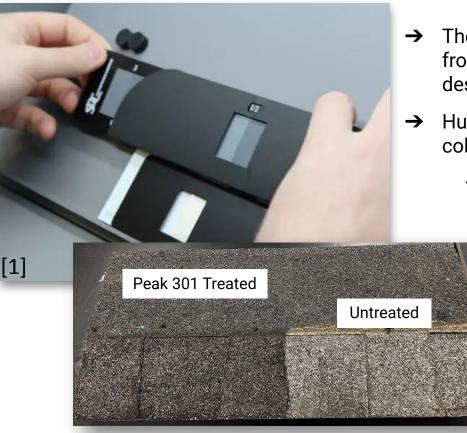
The patented, soy-based chemical design works by repairing the structural integrity of the shingle by creating a membrane that stretches across your entire roof, repairing worn elements that may have been caused by damage from harmful UV rays, deterioration by rain, wind and overall aging. Peak 301 also offers an industry leading 6-year warranty.

That's why Peak 301 is the perfect preventative alternative to replacement. This not only saves you time and money, but also refreshes the appearance of your roof increasing value and curb appeal of your home.



# THE SCIENCE BEHIND PEAK 301

# **COLOR TEST**



- → The COLOR TEST uses a universal gray scale method from white to black, so larger value change was less desirable.
- → Hunter L, a, b and CIE 1976 L\*a\*b\* (CIELAB) are both color scales based on the **Opponent-Color Theory**.
  - This theory assumes that the receptors in the human eye perceive color as the following pairs of opposites. L scale:
    - Light vs. dark where a low number (0-50) indicates dark and a high number (51-100) indicates light.
    - A and b are the four unique colors of red, green, blue and yellow.

[1] https://www.atihongkong.com/2021/12/grayscale-test

# **GRANULAR ADHESION**





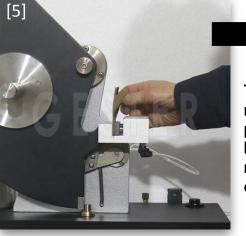
# PEAK<sup>™</sup> dramatically improves shingle grit adhesion for old and new shingles.

- → Granules provide protection of the asphalt coating from the sun and rain and are key to fire and hail impact resistances.
  - An improvement (less loss of granules) is deemed a significant benefit.
- → Untreated aged 3-tab shingles lost 3.32% of their entire mass in our grit adhesion tests. Shingles treated with PEAK<sup>™</sup> Standard and Premium compositions lost only 0.53% and 0.04% of their mass.
  - This is a performance increase of 84% and 99% respectively. Shingles treated with competitive product lost 1.5% of their mass.
  - Untreated aged architectural shingles lost 4.29% of their mass. Shingles treated with PEAK<sup>™</sup> Standard and Premium compositions lost only 1.75% and 1.02% of their mass.
  - This is a performance increase of 59% and 76% respectively. Shingles treated with Roof Maxx lost 2.4% of their mass.

[2, 3, 4] https://www.boldbrothersroofing.com/hail-damage/the-major-cause-of-granule-loss-is-hail-damage/

# **TEAR STRENGTH**





The ASTM D3462 requirement and is primarily controlled by the fiberglass mat's weight and overall strength.

- → Overall tear strengths were decreased by the treatments for all three prototypes.
- → The hypothesis was based on a rejuvenator that achieved penetration to the FG mat and improved the asphalt coating adhesion to the FG fibers.



# **PASS / FAIL TEST**





Peak 301 Treated

FLEXIBILTIY / PLIABILITY: 1" diameter mandrel





### More pliability = More flexible Will not crack

- → The methodology used lowered the temperature of the specimen and mandrel 5°F in increments until cracking was observed in three or more replicates run at each temperature. The results were very significant and a distinguishable benefit.
- → The colder the temperature, the more pliability is important. Peak 301 performed at temperatures that were over 30% colder compared to others.

# HAIL & FIRE TESTS

- → Using the test methods of FM 4473M/ UL 2218.
- → Steel Ball Drop.

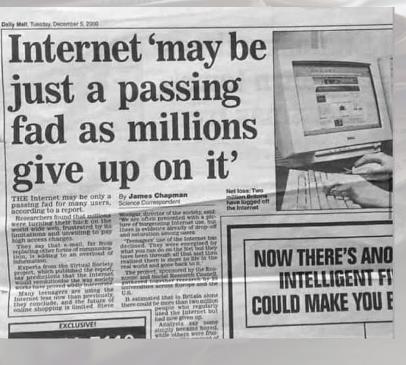




- Fire resistance testing was a significant benefit of the treatments in the Spread of Flame Test.
- When the shingles were set on fire, we saw the competitive brand have a fire spread of <u>three</u> times that of Peak.

### IS ROOF REJUVENATION HERE TO STAY?

### **OR IS IT JUST A FAD THAT WILL EVENTUALLY FIZZLE OUT?**



#### **Every invention and discovery started somewhere.**

Look at the internet. It was only a couple decades ago it was ridiculed and speculated as being nothing more than a passing fad by those not able to see beyond what was currently available.

Today, the internet has impacted and changed almost everything we do: social relationships, communication, business, education, government, healthcare, and more. It has changed our lives.

As you have learned, the creators of Peak 301 have put their product through vigorous testing while refining and perfecting the formula with no corners cut.

And by increasing your roof's life, we hope to positively impact the environment by eliminating the need for a roof replacement as many as one to two times over a home's lifetime, thus reducing waste and carbon emissions.



# **MAKING A POSITIVE ENVIRONMENTAL IMPACT**

Not only is **Peak 301** the all-natural, do-it-all answer for restoring aging asphalt shingles, but we care deeply about the planet and creating a business that **gives back to nature.** 

That is why we are thrilled to share that we are also partnering with **One Tree Planted**, a non-profit organization focused on global reforestation, to **plant a tree for every roof treated with Peak 301**.



One Tree Planted has planted more than **40 million trees** and is working with partners **across 47+ countries** in North America, Latin America, Africa, Asia, Europe, and the Pacific. Learn more at **OneTreePlanted.org.** 



# SUMMARY: WHAT YOU GET WITH PEAK 301

- → Affordable alternative to roof replacement.
- → Longevity: Add another six years or more with repeatable treatments to your roof.
- → Refreshes the appearance of your roof, increasing the value and curb appeal of your home.
- → Peak 301 is so smart and so sustainable in design that it doesn't cost as much as other roof replacement alternatives, like roof sprays and roof coatings, even though it's far more effective.
- → All-natural, non-toxic, sustainable formula (96% USDA certified biobased product).
- → Flexibility: Formulated to specifically soften asphalt to hold shingles together, resulting in nearly 50% restoration in overall structural flexibility.
- → Grit retention: Strengthens the actual structure of the shingle to provide the weatherproofing foundation those granules need to withstand whatever the world throws at 'em throughout the next decade.
- → Roofs treated with Peak 301 lay flatter, dramatically reducing the risk of wind lifting and damaged shingles.
- → Improved resistance to damage caused by hailstorms.
- → 68% improvement in fire protection for your roof.
- → Industry leading six-year warranty.



# READY TO HIT RESET ON YOUR ROOF?





# REFERENCES

- [1] <u>https://www.atihongkong.com/2021/12/grayscale-test</u>
- [2, 3, 4] <u>https://www.boldbrothersroofing.com/hail-damage/the-major-cause-of-granule-loss-is-hail-damage/</u>
- [5] <u>https://www.gesterinstruments.com/elmendorf-tearing-strength-tester-gt-c11a</u>