

Peak™ Substantially Improves Grit Retention and Makes Old and New Shingles More Flexible

EXECUTIVE SUMMARY

Peak™ formulations significantly improve the flexural properties of treated end-of-life shingles.

- Peak™,¹ composed primarily of emulsified sub-epoxidized soybean oil (SESO), decreased the flexural modulus of end-of-life shingles by 61% and the stiffness by 85%.
- After mechanical testing, untreated shingles show significant cracks while Peak™-treated shingles show little or no cracking.

Peak™ dramatically improves shingle grit adhesion for old and new shingles.

- Untreated aged 3-tab shingles lost 3.32% of their entire mass in our grit adhesion tests. Shingles treated with PEAK™ 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™ Premium and Standard 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.

Peak Tear Strength

Overall tear strengths were decreased by Peak being treated to the shingle.

Pliability:

the colder the temperature the more pliability is important. Peak 301 performed at temperatures that were over 30% colder compared to others.

Fire spread:

When the shingles were set on fire we saw the competitive brand have a fire spread of 3 times that of Peak. Peak outperformed and needs additional testing for its possible Peak could outperform standard shingles