

Advanced Protection™ Shingles Brochure

Updated: 1/11



*Quality You Can Trust... From
North America's Largest Roofing Manufacturer!™*

www.gaf.com



Announcing **Advanced Protection...**
For The Place You Call **HOME**



Advanced material science has enabled us to design a shingle with superior protection for your home – while making it nature-friendly by reducing the use of precious natural resources.



What Does **Advanced Protection** Mean For **You?**

We're 100% Committed To The Protection Of Your Most Valuable Asset

When you install a GAF **Advanced Protection™ Shingle**, you're getting the very best combination of **weight and performance** that modern manufacturing technology can deliver. In fact, **no one makes a better asphalt shingle** for:

- ✓ Toughness
- ✓ Granule adhesion
- ✓ Wind uplift resistance
- ✓ Flexibility
- ✓ Fire resistance

But more than that, our history of innovation has supported continuous warranty upgrades that exceed competitors' coverage. That's why we've confidently increased the warranty on all of our laminated shingles to lifetime.* We're the first in the roofing industry to offer this unprecedented level of warranty protection. Why settle for anything less?



Maximum Protection Against Wind Disasters, Too

According to the Institute for Business & Home Safety, more than 60% of all homes in the U.S. are vulnerable to damage from high winds. That's why GAF's Advanced Protection™ shingles are leading the way to ensure your protection.

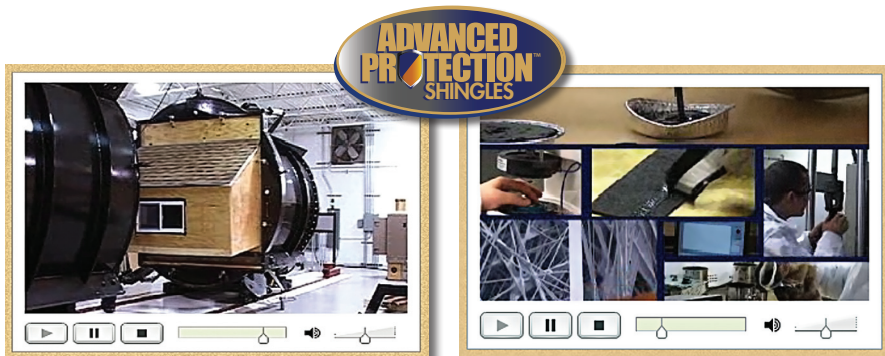
Our special Dura Grip® adhesive seals our shingles so tightly, they pass the industry's two toughest wind resistance tests:

- ASTM D3161, Class F, 110 mph
- ASTM D7158, Class H, 150 mph

GAF is the first manufacturer that can say that all of its shingles pass these two critical wind resistance tests. Since wind from hurricanes and tornados cause more than \$6 billion each year in property damage, you need all the protection you can get.

*The word "lifetime" means as long as the original owner (or the second owner, if coverage was properly transferred during the Smart Choice® Protection Period) owns the property where the shingles are installed. See ltd. warranty for complete coverage and restrictions.

“More than 60% of all homes in the U.S. are vulnerable to damage from high winds”



To learn more about **Advanced Protection™** shingles, visit www.gaf.com/aps

What Does **Advanced Protection** Mean To **The Experts?**

Some people think that asphalt shingles are just a low-tech (albeit highly effective) roofing material.

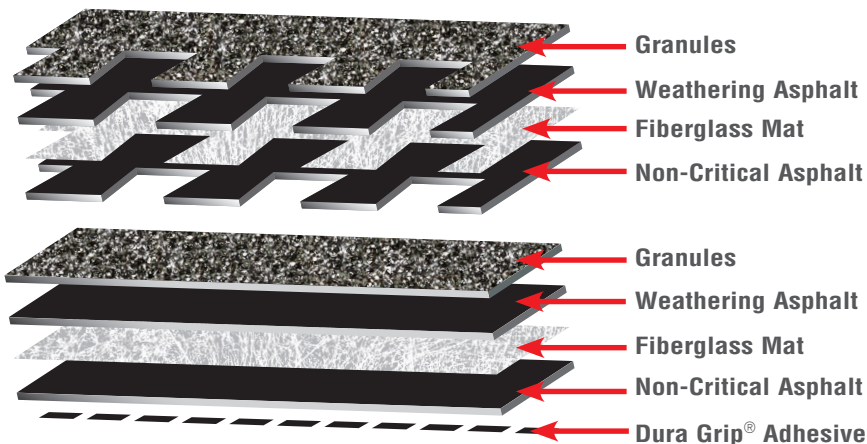
But now, GAF has turned the art of making roofing shingles into a science, with its Advanced Protection™ shingles. Utilizing some of the most advanced

design, manufacturing, and testing techniques available in any industry (including computer simulation technology originally developed for the Space Shuttle), the result is today's most advanced roofing technology—now available to consumers to protect their home.

Compare GAF's Advanced Protection™ Shingles To Old-Fashioned Shingles...

	GAF Advanced Protection™ Shingles	Old-Fashioned Shingle Technology
Fiberglass Mat (the "heart" of the shingle)	<ul style="list-style-type: none"> Patented low-profile technology includes a proprietary orientation of glass fibers, for maximum strength and durability 	<ul style="list-style-type: none"> Typically results in the absorption of excess asphalt to meet minimum industry requirements
Asphalt (provides waterproofing performance)	<ul style="list-style-type: none"> Advanced process control allows us to optimize the critical top (i.e., weathering) layer for superior long-term performance against severe weather 	<ul style="list-style-type: none"> Excess asphalt applied to bottom (i.e., non-weathering areas) increases shingle weight with no added benefit
Filler (mixed with the asphalt to bind components)	<ul style="list-style-type: none"> Premium limestone content optimized for maximum toughness and wind resistance Excess, unnecessary limestone (which can promote cracking) eliminated 	<ul style="list-style-type: none"> Unnecessary fillers used to artificially increase shingle weight—with no benefit in performance If very excessive, can even increase the risk of shingle cracking
Adhesive (seals shingles on roof)	<ul style="list-style-type: none"> Proprietary Dura Grip® adhesive locks shingles tightly in place Allows every GAF shingle to pass the industry's two toughest wind tests (ASTM D3161 Class F 110 mph and D7158 Class H 150 mph) 	<ul style="list-style-type: none"> Wind uplift resistance can vary by plant, depending on adhesive formulation May not meet highest wind resistance tests

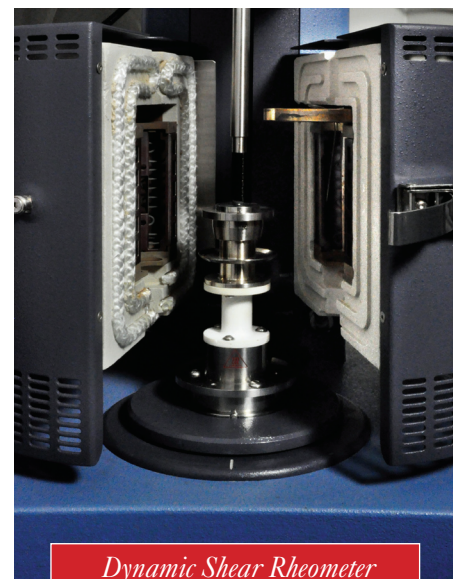
The layers of a Timberline® Advanced Protection™ Shingle



Thermo-gravimetric Analyzer evaluates asphalt ratios to ensure superior durability



Dynamic Mechanical Analyzer measures flexibility and toughness



Dynamic Shear Rheometer provides critical data for shingle optimization

“What Does **Advanced Protection** Mean For **Nature?**”



Everyone wants to do their part to be environmentally responsible. GAF's Advanced Protection™ Shingles:

- Eliminate the **unnecessary waste of natural resources**, because they use less asphalt and natural limestone
- Reduce **transportation waste**, because they are weight-optimized to minimize fuel use
- Result in less **landfill waste**, when the shingles are eventually replaced
- Can be **recycled** to benefit the environment. Used asphalt shingles have traditionally not been recycled—they've just been thrown into landfills. That's why GAF supports a new recycling program—that will allow our contractors to recycle old shingles for re-use in roadways!



Quality You Can Trust...
From North America's
Largest Roofing
Manufacturer!™

www.gaf.com



GAF is a
U.S.-Owned Corporation

