



Proven Fuel Savings

At the General Motors Desert Proving Ground, some of the world's top automotive testing engineers, in an independent test, validated the fuel saving performance of TrailerBlade™. Not only did TrailerBlade™ pass the SmartWay® certification requirement for an Advanced Side Skirt, it **exceeded the certification requirement by more than 43%.¹**

- SmartWay® Certified as an Advanced Side Skirt.
- Meets CARB Requirements.
- Achieved **greater than 7% fuel savings** in an independent test.
- Upper Panel made of industry-standard materials that are both **flexible and durable**.
- Patent Pending, spring-loaded mounting pillar not only flexes to avoid damage but is pre-loaded to eliminate vibration.
- Pillar is self-enclosed so it avoids collecting snow, ice, mud, and other road debris.
- Component design lowers cost of repair. **You only replace what you damage.**
- Single piece, flexible Lower Skirt made of TPV rubber raises wind efficiency and ground clearance (as high as 25") while lowering the risk of damage.
- Easy, **bolt-on installation**.
- The only 4-Way adjustable skirt on the market. Both the forward angle and side-pitch can be adjusted to achieve the optimal balance between fuel efficiency, esthetics, and durability.
- Clean design; **looks like it belongs** on a trailer. The Upper Panel can be color matched.



¹ TrailerBlade™ demonstrated 7.15% fuel savings. The minimum requirement for an advanced skirt is 5%.

Before

Inward Flex

Outward Flex

After



Proven Durability

The right combination of proven materials, rugged design and efficient manufacturing make TrailerBlade™ economical to buy, **easy to install, and ruggedly built**. It will last for years.



- The **Upper Panels** are a **steel composite** panel (polyethylene core) that is similar to what clads the trailer. Their high-gloss, polyester coating match your trailer's appearance and will look great for years. The panel's composition is formulated to achieve the precise combination of aerodynamic efficiency and flexibility. The combination of flexible composite panels and articulating Mounting Pillars allows TrailerBlade™ to absorb tremendous side impacts.
- The proprietary **Mounting Pillar** pivots and articulates. This **four-way adjustment** not only prevents damage, it ensures a perfect installation on every trailer, every time. Its rugged, dual-spring design ensures a long life cycle. Its slim profile resists snow, ice and mud buildup.
- The proprietary **Lower Skirt** gives TrailerBlade™ the highest ground clearance in its class. TrailerBlade has successfully recovered from a 25" perpendicular impact. The skirt's design also allows it to flex outward in order to release potentially damaging objects. It is formulated from a **thermoplastic vulcanate compound** (TPV) that will maintain its aerodynamic profile in triple digit temperatures and yet be flexible enough to pass over objects in temperatures as low as minus 40 degrees.

Length = 22 feet • **Height** = 32 inches • **Weight** = 220 pounds

Upper Panel = Polyester Coated Steel Laminated to an LDPE Core

Lower Skirt Material = TPV Vulcanized Plastic

Mounting = Proprietary Articulating Steel Pillar



Fuel Savings Estimator

Sample Fuel Savings Calculator

SmartWay Requirements

In order to achieve Smartway certification, TrailerBlade had to demonstrate a minimum fuel savings of 5% to qualify as an Advanced Side Skirt. The SmartWay test requires that an SAE J1321 fuel economy test be performed at a certified track and be supervised by an independent, certified teting engineer. Both the track and the engineer must be pre-approved by the EPA in order for the test to be valid. Wind speed cannot exceed 12 mph throughout the test and the temperature range is relatively narrow. The test is run with a loaded trailer and the fuel is weighed with a calibrated scale to precisely measure the fuel used. These rigorous standards are enforced to ensure that SmartWay certified equipment does what it claims -- save fuel.

"Real World" vs. Tested Savings

The SmartWay certification test is conducted at highway speeds. Any aerodynamic device loses effectiveness at lower speeds. If your tractors spend a large percentage of operating time at lower speeds, then your fuel savings will be less. Therefore, accurately predicting your highway miles is a critical factory in determining your fuel savings.

Inferior Products Will Cost You

The minimum standard for a SmartWay Certified side skirt is 4%. Using the numbers from the example to the right, purchasing a skirt that generates only 4% in fuel savings would reduce your savings by \$16,962 over the life of the trailer (\$53847 X 0.0315 x 10 years).

Payback in Months, Not Years

Fuel savings is obviously based on the tractor, but to determine payback you must use the annual savings per trailer figure calculated in Step 5. Using the example on the right, your payback on TrailerBlade™, at retail price and including labor at retail rates, would be much less than 1 year.

*There are dozens of factors that affect fuel consumption and it is impossible to accurately predict future fuel economy. However, TrailerBlade™ has proven fuel savings of 7.15% at highway speeds in accordance with strict EPA testing guidelines. Based on this data, the above can serve as a guide toward what fuel savings you might be able to achieve using TrailerBlade™.

1. Note the following:

a. Average MPG	_____	<u>6.5</u>
b. Current Fuel Cost	_____	<u>\$3.50</u>
c. Annual Highway Miles Per Tractor	_____	<u>100,000</u>
d. Tested Fuel Savings Percentage	<u>.0715</u>	<u>.0715</u>
e. Trailer-to-Tractor Ratio	_____	<u>2:1</u>

2. Calculate Annual Gallons Used in Highway Driving

$$\frac{\text{Annual Highway Miles Driven}}{\text{Average MPG}} = \frac{100,000}{6.5} = 15385 \text{ Gallons Used}$$

3. Calculate Fuel Cost for Highway Miles Driven

$$\text{Gals Used} \times \text{Cost Per Gal} = 15385 \times \$3.50 = \$53847 \text{ Fuel Cost}$$

4. Calculate Annual Savings Per Tractor

$$\text{Fuel Cost} \times \text{Savings Pcg} = \$53847 \times .0715 = \$3850 \text{ Annual Savings per Tractor}$$

5. Calculate Annual Savings Per Trailer

$$\frac{\text{Annual Savings Per Tractor}}{\text{Trailer-to-Tractor Ratio}} = \frac{\$3850}{2} = \$1925 \text{ Annual Savings per Trailer}$$

