

V O L V O

Own the day

# VNR AERODYNAMIC FEATURES



Volvo Trucks. Driving Progress



## Fuel efficient in town or out

The all-new Volvo VNR is the most fuel-efficient vehicle we've ever created for local and regional haul in North America. Refined aerodynamic design is a key reason this VNR offers up to 7.5% improvement in overall fuel efficiency as compared to our previous models. Sleek style and smooth lines help it slip through the wind, saving you on fuel every mile.







## Aerodynamic improvements

A full description of the all-new Volvo VNR's aerodynamic features highlighted here can be found on the following page.

# Aerodynamic improvement details

<div>A</div> <div>Wedge-shaped body</div>	The VNR’s body spreads out from the narrow nose to the A-pillar of the frame, which is slightly inset. The cab then widens to the B-pillar. This unique wedge form helps air travel effortlessly along the body of the vehicle.
<div>B</div> <div>Hood</div>	Curvature at the front of the hood has been increased. The hood shape reduces turbulence as air begins to move over the vehicle and eventually back to the trailer.
<div>C</div> <div>Cooling package</div>	The cooling package has been designed to efficiently work with the more aerodynamic hood. The hood is now virtually “shrink-wrapped” around the engine. The recirculation shield forces air through the radiator, not around it, for superior cooling.
<div>D</div> <div>Wrap-around windshield</div>	The windshield is raked and curved. At the A-pillars, the glass is bonded directly to the cab’s steel body and capped at the edge for a seamless transition to the door.
<div>E</div> <div>Mirrors</div>	The door and hood mirrors* feature an all-new shape and reduced surface area. The door mirrors are designed with a single arm to decrease wind resistance and airflow disruption around the A-pillar and door surfaces.
<div>F</div> <div>Camera Monitor System</div>	The optional Camera Monitor System (CMS) can replace traditional side mirrors. The CMS features rear view monitors inside the cab, mounted to the A-pillar. By removing the traditional hood and large side mirrors, the CMS offers improved fuel efficiency.
<div>G</div> <div>Roofline</div>	We offer a variety of roofline options including the VNR daycab with a full roof fairing, a modified height (12' 6") full fairing, or the VNR mid-roof sleeper. In each configuration, the angular roof features an optimized centerline. The new design eliminates the need for an exterior sun visor in most applications, while clearance lamps are now flush-mounted to optimize air flow as it travels over the cab.
<div>H</div> <div>Roof extension</div>	The angled roofline is further optimized by the “ski-jump” style roof extender that helps air stay attached as it travels over the cab and on to the top of the trailer.

*\*Hood mirrors are not used on VNR's featuring the Camera Monitoring System.*

<div>I</div> <div>Side deflectors</div>	The cab side air deflectors are designed to guide air flow to the trailer. The upper and lower deflectors are affixed to the cab. Optional extenders up to 12" in length can be ordered for VNR sleepers.
<div>J</div> <div>Grille</div>	The grille complements the hood design to optimize cooling while reducing surface area. It is specifically sized to the radiator. The intake duct sits lower to improve airflow to and around the engine.
<div>K</div> <div>Bumper and spoiler</div>	The aerodynamic bumper and spoiler have a lower profile and split line with no central opening. This lessens turbulence and resistance to improve fuel efficiency without compromising stability.
<div>L</div> <div>Headlamps</div>	The dramatic, double-V headlamps are integrated with the bumper and hood for a seamless transition into the fender. The headlamps are also positioned lower on the vehicle to further reduce drag.
<div>M</div> <div>Fender</div>	The front fender profile has been reduced for a smoother transition of air from the hood. Airflow can follow a continuous path off the fender to the side of the cab and trailer.
<div>N</div> <div>Hood cowl vent</div>	After cooling the engine, air exits through the hood cowl vent and is precisely controlled. The air stays connected to the truck body and flows down the side for improved aerodynamics.
<div>O</div> <div>Front wheel closeouts</div>	The front wheel closeouts reduce the gap between the fender and the wheel well. These closeouts guide more air away from the wheel opening and reduce turbulence under the hood.
<div>P</div> <div>Chassis fairings</div>	Chassis fairings aid aerodynamic performance by maintaining the cab’s low profile. Re-designed step indentations and fuel/DEF door covers let air travel down the side of the cab.
<div>Q</div> <div>Ground effects</div>	The VNR’s chassis fairings now feature extended ground effects that hug the road and allow fewer disturbances as air passes down the cab.
<div>R</div> <div>FlowBelow™</div>	Whether you choose a single or tandem axle configuration, FlowBelow rear fairings and aerodynamic wheel covers can reduce turbulence around the rear axles. FlowBelow and Enhanced FlowBelow are both available for factory installation on the VNR.

**V O L V O**

Some vehicle options and services may not be available at time of introduction.  
Some vehicles shown with optional equipment. All specs current at time of publication release.  
Performance data based on engineering calculations and real-world data.

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