



AIRSTREAM®

QUALITY *Guide*

An Inside Look at How Every Airstream is Built to Last



A Lifetime of *Adventure*

Born from humble beginnings, Airstream travel trailers are the vision of a man named Wally Byam. Wally was born on the Fourth of July in 1896, just one generation removed from a pioneering family who made a new life where the wheel ruts of the Oregon Trail came to an end. From this seed, planted in American soil, grew a legend.

Shortly after founding Airstream Trailers, Inc. in 1931, Wally constructed his first riveted aluminum shell trailer. Many of those original trailers are still on the road today. Over the next 90-plus years, countless innovations followed. But since the beginning, Airstreams have been built with the same obsessive attention to detail.

No Shortcuts to *Quality*

Airstream travel trailers are unlike any other recreational vehicle in the world, and it's not just because of their legendary history or passionate community of owners. It's also because they're constructed under a single roof in Jackson Center, Ohio, built by hand under the watchful supervision of expert craftspeople – many of whom have worked for the company for decades.

Our manufacturing process differs considerably from what you see in other RV brands or automobile manufacturers. We focus on quality craftsmanship, building far fewer units every year compared to many other manufacturers in the RV industry. It may not be the easiest or the fastest way to build an RV—but we wouldn't do it any other way.

After more than 90 years, we're still making Airstreams the right way: So they'll provide a lifetime of adventure and last for generations to come.

While most typical “box-type” trailers can be constructed in under 50 hours, each Airstream takes more than 350 hours to complete.



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04 Section

Building the Foundation

Airstream travel trailers are iconic, treasured, and passed from generation to generation. Today, they carry on Wally's legacy – his vision of high adventure, his pride in quality, and his spirit of innovation. And they're true to his promise "to make your travel dreams come true."

What follows in this guide is the story of how they're made, and why every detail of that process is so important. In this section, you'll read about the chassis and other components that form the solid foundation on which an Airstream travel trailer is built.

It Starts with the Chassis

Every component of an Airstream travel trailer offers the ideal combination of easy towability and maximum strength. The chassis, which is built separately from the exterior shell, is no different. And that's where it all begins.

At their core, each Airstream travel trailer features a ladder frame steel, free-standing, self-supporting chassis upon which the riveted aluminum shell is secured. Welded steel outriggers are utilized for additional support and strength, and the powder coated chassis has a corrosion-resistant coating. Numerous components are tucked between the "steps" of the ladder, including holding tanks, the spare tire, and some plumbing, gas, and electrical lines.

Airstream is the only travel trailer manufacturer in the world that designs their tanks to be placed within the frame, resulting in a lower center of gravity, overall lower weight, increased aerodynamics, and better weight distribution. The underbelly is then covered in aluminum, protecting the tanks, frame, and components while providing a superior aerodynamic shape.



A Smooth Ride

Next, the axles are installed. All Airstream travel trailers feature a premium rubber torsion suspension system that offers a number of advantages when compared to the industry-standard spring axle. Airstream has been using torsion axles for more than 50 years.

And each wheel has its own suspension, absorbing 50% more road vibration and reducing wear and tear on tires and other components.

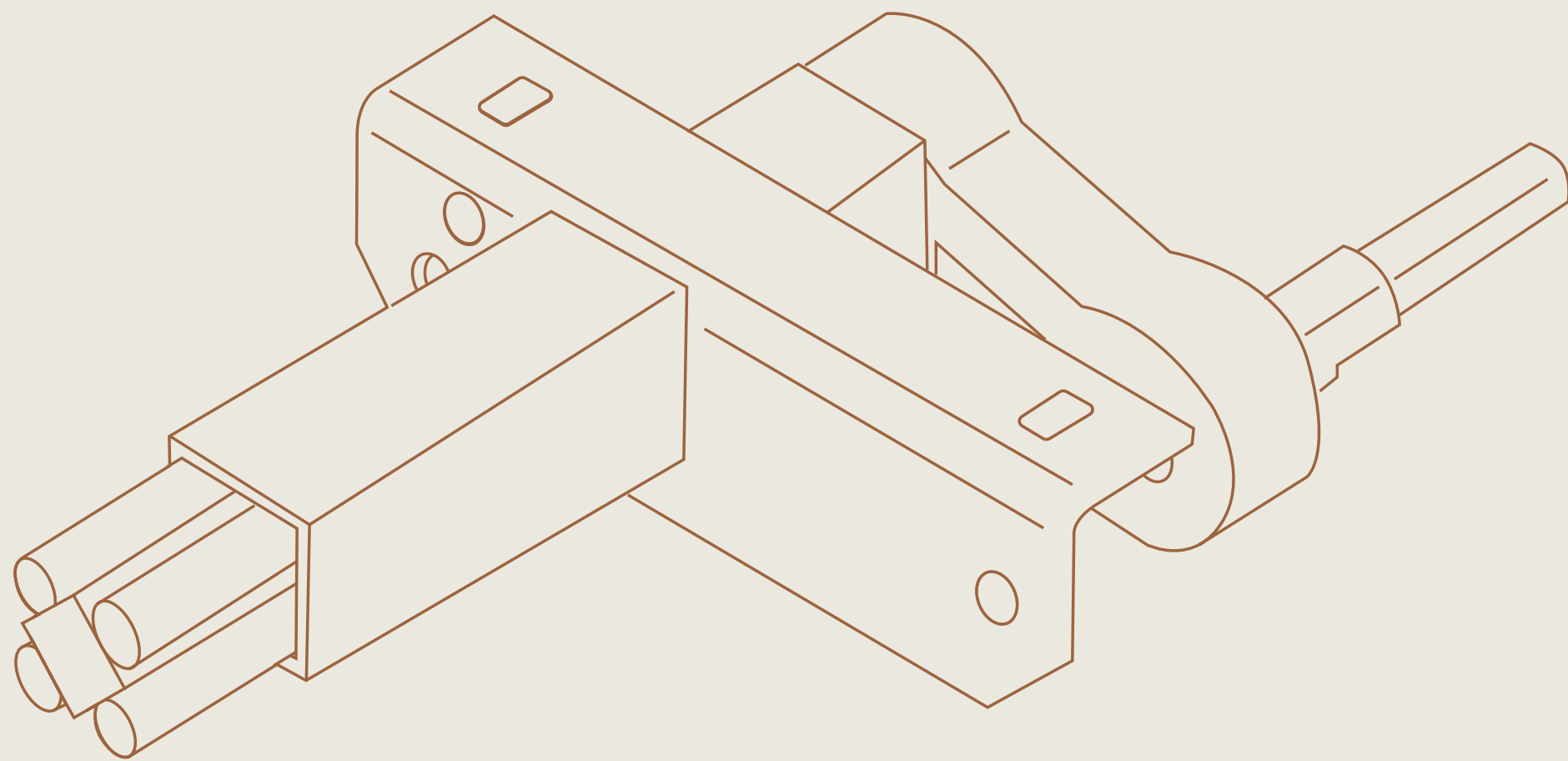
This virtually eliminates flexion in crosswinds, and because the suspension reduces leaning during turns, the overall towing experience is smoother.



The Competition vs. Airstream Suspension

How does Airstream's torsion suspension system compare to a traditional suspension? It offers far better handling than the standard spring axles found in most other trailers, which have a higher center of gravity and are more likely to rust over time.

Airstreams can even be taken over rough terrain – a big reason why they've seen more of the world than any other brand. And thanks to the independent suspension, multi-axle models can be towed on a flat tire over short distances at a slow speed.



Airstream manufactures the safest, most aerodynamic, and easiest to tow travel trailer available on the market today.



Fun Fact: To this day, Airstream extensively tests all new products before they are incorporated into the product line.

The first torsion axel was tested on Wally's infamous gold trailer during its tour through Africa before incorporating into production.

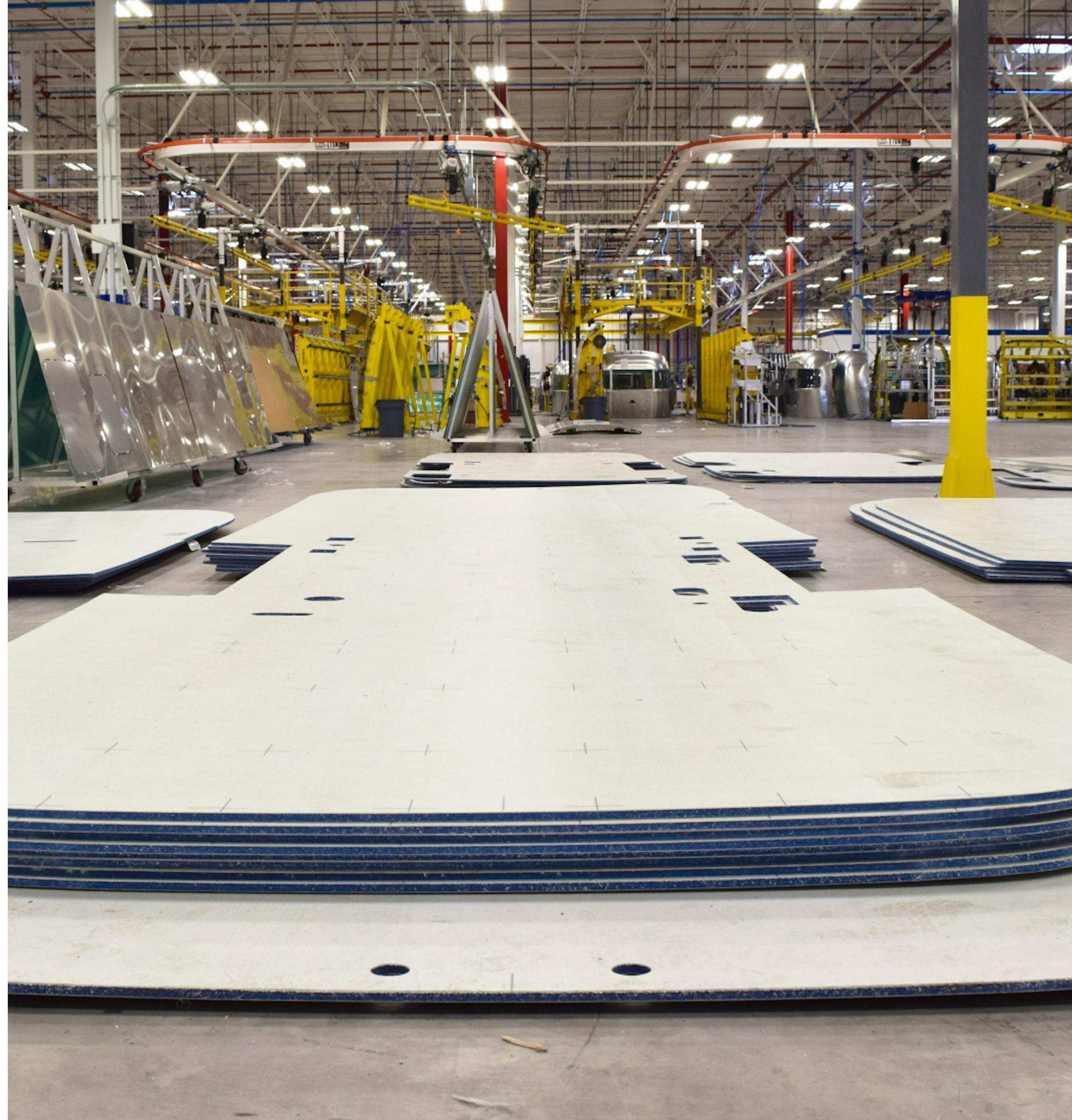
A Low Center of Gravity

With the chassis ready to go, it's time to build the superstructure. And that starts with the floor. Each Airstream is built from the bottom up, similar to a house.

The floor is made from a special state-of-the-art composite material that naturally resists water and provides more screw retention and overall strength.

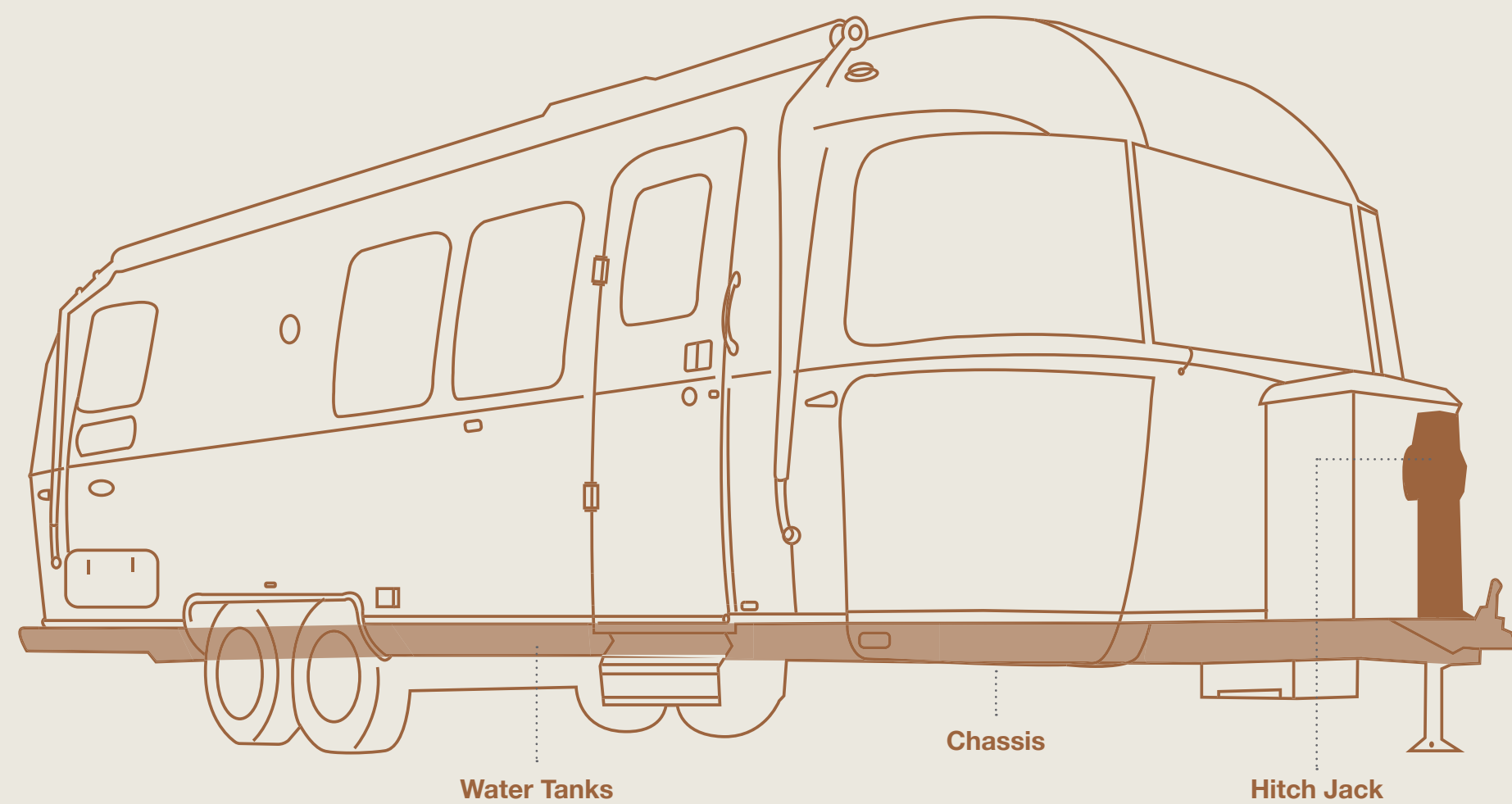
Because the holding tanks are built into the chassis frame, more than half the Airstream's total weight is below the floor line. Why's that so significant? A low center of gravity means greater stability and smoother towing.

Every Airstream floor plan maximizes functionality and comfort, and offers the most even weight distribution possible. It all starts at the bottom.



Completing the Chassis

While the shell is built nearby, work continues toward a finished chassis. The main water tanks and dump valves are insulated and installed, the hitch jack is installed, and sub-floor plumbing and heating ductwork (which warms the water tanks and helps prevent freezing) are added. Now, the chassis is ready to meet up with its iconic aluminum shell.



Section Summary

In this section, you learned:

- Airstream's innovative chassis offers superior strength and balance
- The torsion suspension reduces road vibration up to 50%
- Why an Airstream's low center of gravity is so advantageous





02 Section

Building the Shell

You probably remember the first time you saw an Airstream travel trailer. The iconic, gleaming silver exterior makes them not only memorable, but also instantly recognizable. But do you know why they're built that way? In this section, you'll learn how the main structure is riveted together from individual pieces of aluminum – and why we've done it this way for over 90 years.

That Iconic Shape

Wally Byam named his creation Airstream “because that’s the way they travel, like a stream of air.” That iconic shape isn’t just part of their charm: An Airstream’s aerodynamic, low-profile shape naturally delivers low wind resistance, creating less drag. Side winds are almost unnoticeable, and the rounded end-shells make them easier to control even in heavy winds.

Another advantage? Our aerodynamic designs result in less fuel consumption and longer travel in between fill-ups.



Built with Purpose

Each Airstream uses an average of 1,200 square feet of strong, lightweight, coated aluminum. It's all treated with materials that resist ultraviolet rays, mold, discoloration, cracking, flaking, and pulverization. Reflective white enamel on the roof further reduces interior temperatures by up to 7°F.

Our manufacturing process eschews robotics in place of handmade craftsmanship, but we do rely on some precision tools to ensure better quality and greater repeatability in our production process. CNC routers cut openings in our aluminum sheets, which are templated for later installation of windows, the door, wheel wells, water fill doors, furnaces, water heaters, and storage access.

Visible in the background are exterior molds dating back to the 1950s, reserved for crafting replacement skins for vintage trailers in need of repair.

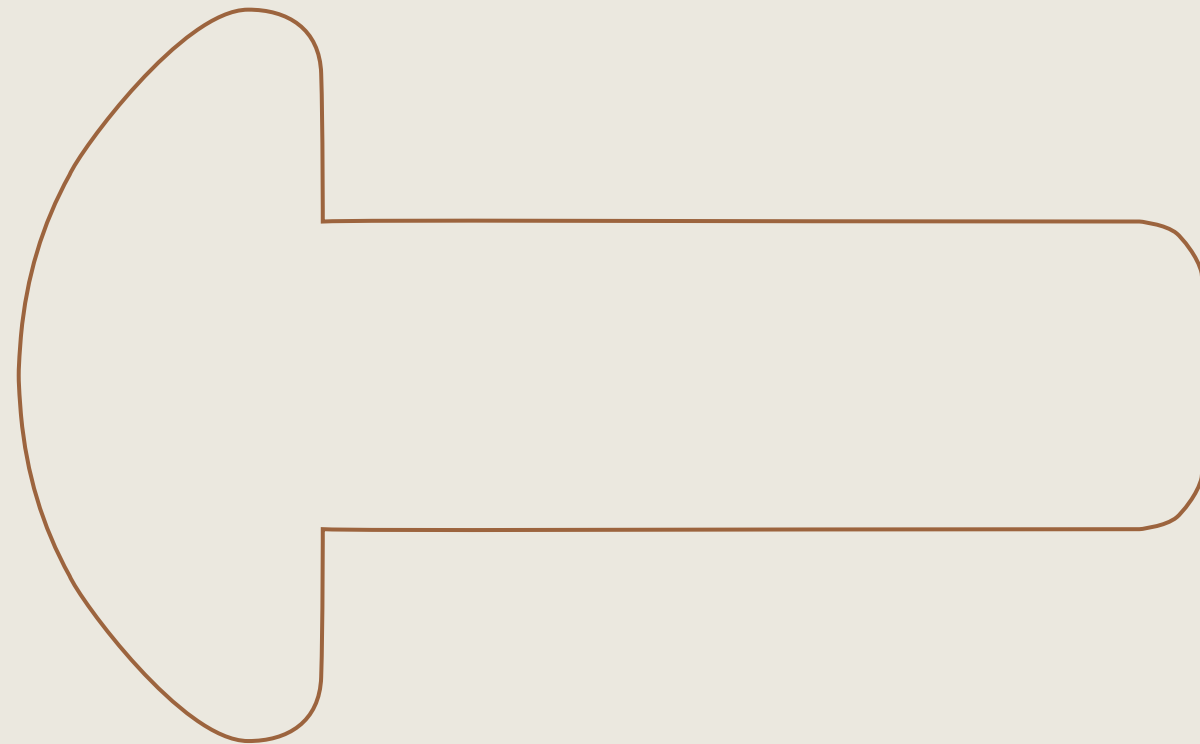


Absolutely Riveting

With each section selected and cut, it's time to piece it all together. The primary shell segments, which are individually stretch-formed and trimmed from aircraft-grade aluminum, are hand-riveted to the aluminum structural ribs.

An average of 3,000 rivets is used to build each Airstream. While labor-intensive, it's done with great care to avoid denting or otherwise weakening the aluminum. Riveting partners cannot see or hear each other: One is on the outside with a rivet gun, and the other is inside with a bucking bar to flatten each rivet.

3,000
Rivets



Each shell segment is constructed individually. Then, they're all precisely joined together and attached to the floor. Sealant is applied to every seam.



A Monocoque Shell

An Airstream and an airplane's fuselage are built similarly, as if constructed to take flight. Why? The outer skin is built to absorb almost all the stress exerted on the trailer's body, offering superior structural integrity and protecting vital components, both inside and out.

This is called a “semi-monocoque” structure. All its separate components are pieced together in such a way that they become what's essentially one solid, unified shell. That means a finished Airstream is extremely durable, while remaining lightweight.

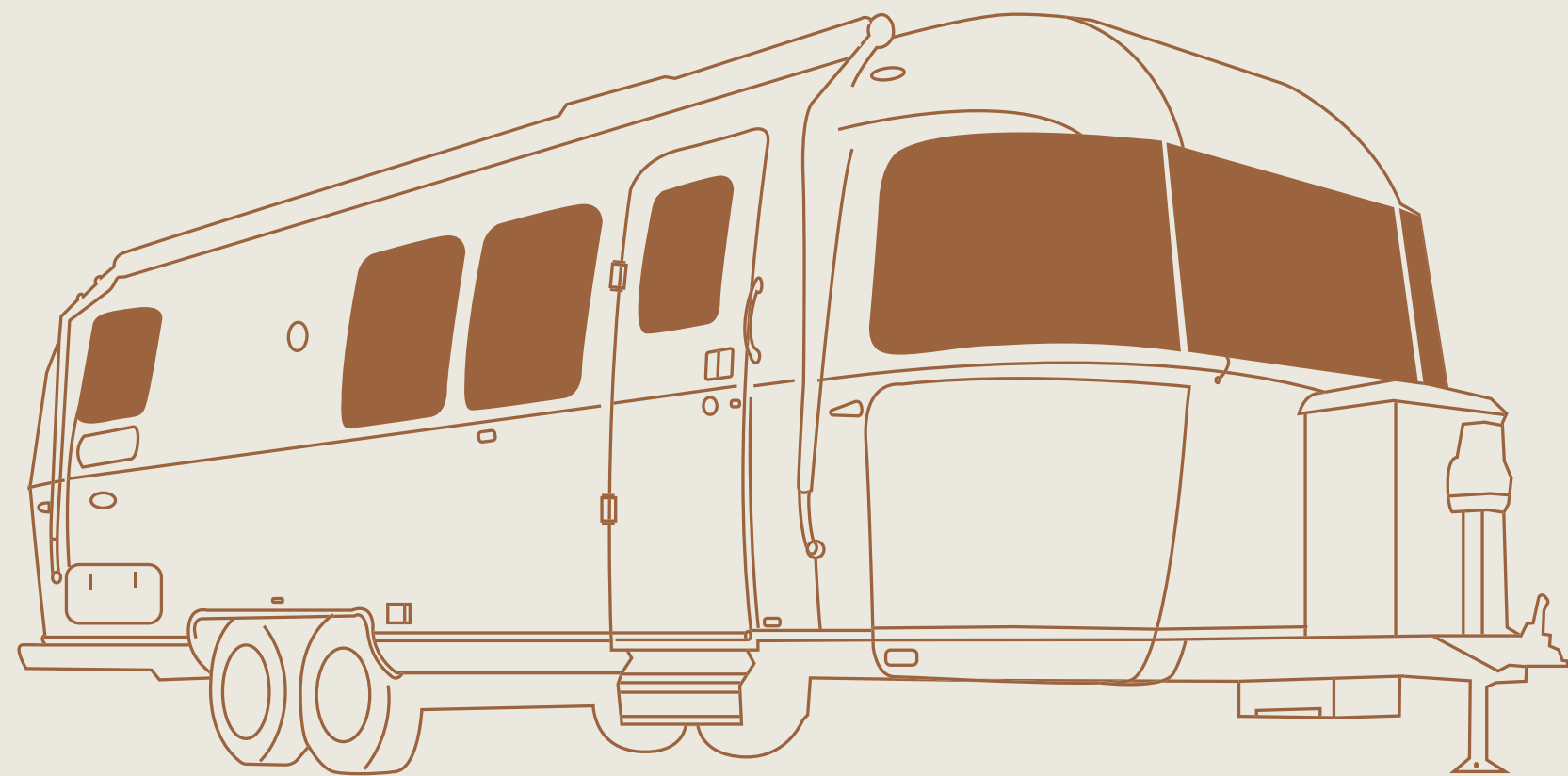


I Can See Clearly

Now that the exterior shell is nearly finished, it's time to install the windows. We build our windows in-house, rather than sources from suppliers like the rest of the industry. Each window is built in an extruded aluminum frame, both for a clean appearance and superior durability. The windows are placed in the previously cut holes and secured with more rivets.

Airstream windows are made from thick tempered glass that's bonded to the frame using polyurethane to eliminate the risk of leaks. Interior seams are sealed, and each window that opens has a built-in gutter above the glass to divert rain.

And at last, the whole exterior shell is complete and ready to be affixed to the chassis.



Tinted glass minimizes heat transfer – keeping the Airstream nice and cool – and protects the interior from ultraviolet rays. Unlike in many recreational trailers, the front panoramic windows can open nearly 90 degrees to let in fresh air. And they're shielded by three separate rock guards.



Section Summary

In this section, you learned:

- Airstream's unique shape reduces fuel consumption and your carbon footprint
- The shell is constructed from 1,200 square feet of aluminum
- How Airstream's trademark monocoque shell acts as a durable superstructure





Completing the Exterior

In the next phase of construction, the completed outer shell is securely connected to the chassis. Then, the Quietstream™ ducted climate control system is installed. And before any work can begin on the interior, each Airstream undergoes extensive quality checks in our special water testing bay. This ensures the shell and chassis are in perfect condition for the next step of the manufacturing process.

A Solid Connection

The entire semi-monocoque exterior shell is lifted with a crane, lowered onto the chassis, and securely riveted. No other recreational trailer on the market can be lifted by its roof – a true testament to the strength of the aluminum superstructure.

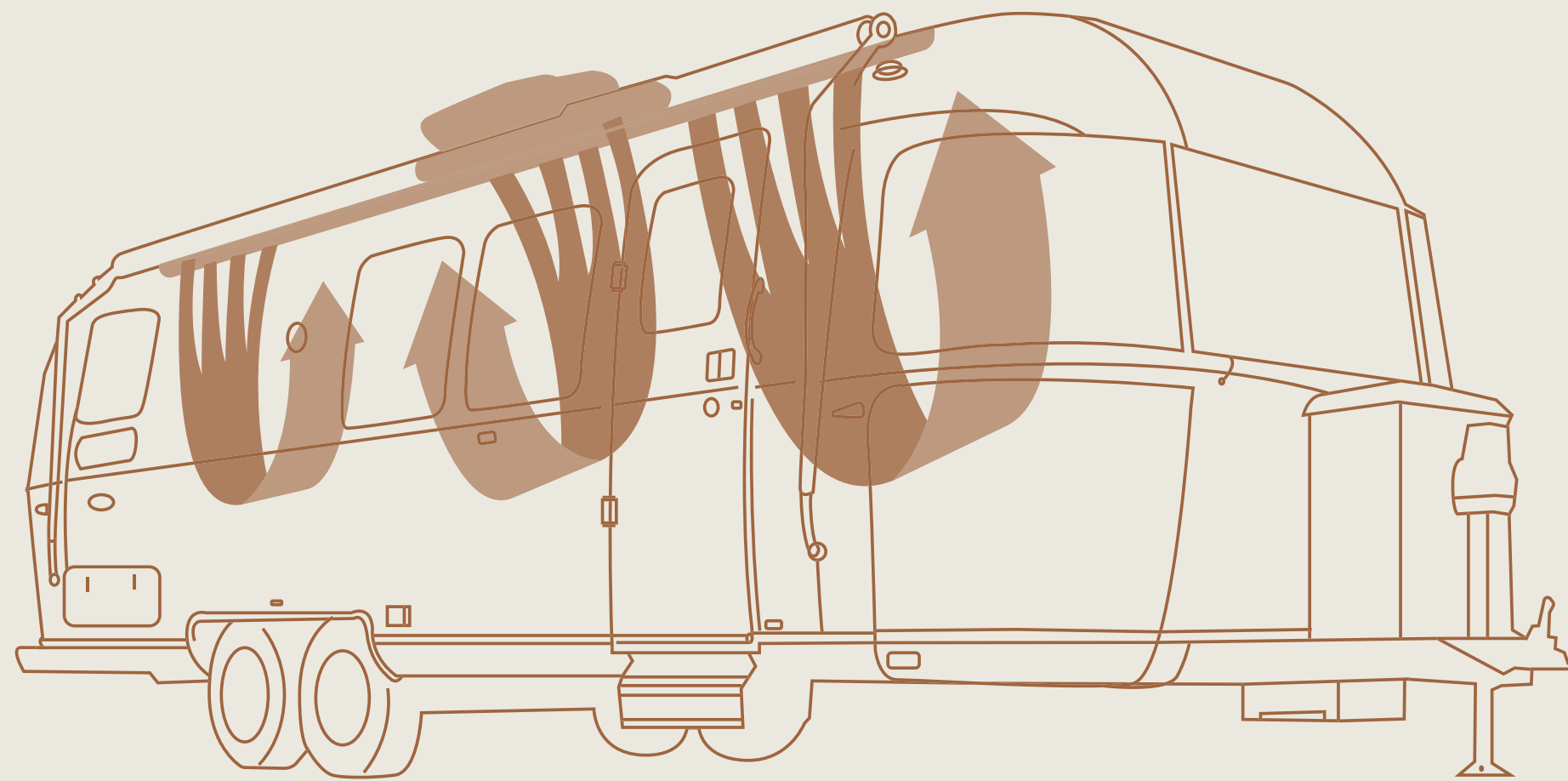
As this is done, wiring is threaded into the shell. The composite floor is also firmly screwed onto the chassis. The shell and chassis are now permanently joined, but there's still plenty of work to be done before the Airstream is finished.



Cool Summer

Next comes the roof air conditioner. Quietstream™, Airstream's ducted climate control system, is now standard on all travel trailers except for the Bambi and Basecamp. Quietstream™ effortlessly cools the cabin within minutes, and it does so in relative silence. So, instead of listening to a groaning, clattering air conditioner, you can relax in comfort.

The air conditioner also features a heat pump – an electric element that pulls ambient heat from the air and transfers it to the coils, heating the trailer with electric versus the LP furnace. Drip tubes are routed under the trailer to drain condensation from the AC unit. Why? Usually, RV manufacturers allow this condensation to drip down the exterior walls of the trailer, which causes corrosion and discoloration. We take the extra step to keep your trailer looking great.



A 30 Minute Water Check

Once the exterior is completed, every Airstream must pass a rigorous water check before proceeding down the line. In a special testing bay, we spray the exterior with **more than 10,000 gallons** of (recycled) water at hurricane-force pressure for 30 minutes.

All the while, a technician is inside checking for leaks. In the rare event that a leak is detected, it's fixed right away, and the exterior shell is completely retested before moving down the line. Other brands let the customer be the first to test for water leaks. We couldn't stand behind our superstructures unless we did everything in our power to make sure that the trailer is 100% ready for its first journey. Only once we're confident the unit is properly constructed and sealed, do we begin work on the internal buildout.

[See it in action! Watch our production video tour](#)



Section Summary

In this section, you learned:

- How the Airstream's outer shell is joined to the chassis
- The many advantages of Quietstream™ ducted air technology
- About the high-pressure water testing each Airstream undergoes





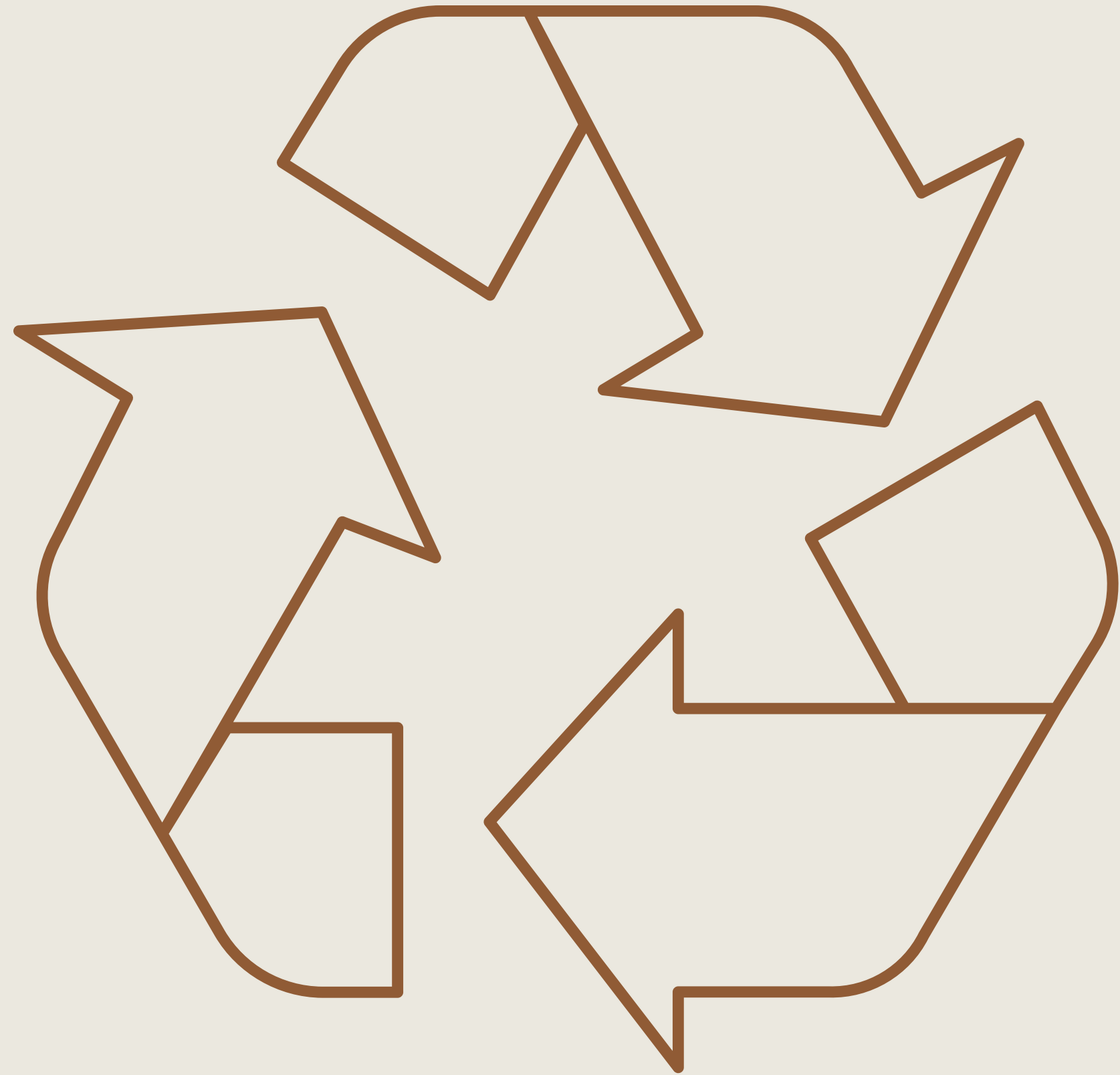
Section 4

Interior Systems

Now that the primary shell is complete, the interior systems can be installed. That includes building the interior skin, fully wiring 12V and 110V electrical systems, completing the plumbing and LP gas systems, constructing and installing furniture, and more. Inside are many of the same systems you find in a house – plus a few you won't.

Installing the Insulation

After an Airstream passes its water check, the interior is sprayed with a water-based adhesive, and the insulation is installed. Postconsumer recycled insulation is added between the structural ribs to protect against extreme temperatures.



Building the Interior Shell

Next, the interior superstructure is assembled, using the same high-strength aluminum found on the exterior. Thermal barrier bonding tape is applied between the interior and exterior skins to reduce temperature transfer. The inner shell is riveted to the aluminum bows and ribs of the primary framework. After the interior shell is complete, an inspector uses a high-voltage electrical device to check all electrical outlets and connections before the furniture and appliances are installed. All plumbing and tanks are also inspected using high-pressure air to ensure the system doesn't have any leaks.

No wood is used in constructing the shell – even areas around the vents, windows, and air conditioners are built from aluminum, which prevents components from deteriorating over time.



Feels Like Home

Luxurious seamless vinyl flooring is secured atop a single piece of composite flooring and then cleaned. Then the bathroom is built. The shower's fiberglass shell is installed, a hole is cut for the drain, and the plumbing is connected. Next, the lavatory cabinet, toilet assemblies, and final shower components are added.

Every Airstream bathroom features ample storage, stainless steel faucets, quality fixtures, and flooring and surfaces that are easy to maintain and clean.



Kick Back and Relax

Every Airstream is custom-fit with handcrafted furniture assembled in the wood shop at our production facility in Jackson Center, Ohio. We use only high-quality marine-grade lite-ply or hardwood – you won't find particle board in any trailer – and everything is built as solid-wood assemblies, just like household cabinetry.

All cabinetry, wardrobes, and furniture are designed specifically for each model, meaning you won't find Flying Cloud furniture in a Classic. Once constructed, the wood panels, frames, drawers, solid wood trim, and solid surface countertops are sanded, glued, and finished. Then, any raw wood is stained and finished – not just because it looks nicer, but because it's easier to clean and will last longer, too.



Only One Way In

Early in the process, an Airstream travel trailer's outer shell is fully completed before any furniture, cabinetry, plumbing, and electrical systems are installed. Every component fits through the 26"-wide door, which takes eight hours to manufacture and is built in-house from high-strength aluminum. After it's been carefully riveted into place, it seals tight, like a bank vault.

This is a huge reason why vintage Airstreams are so popular. Airstream travel trailers carry the highest resale value in the industry, and that's not just because they're durable enough to last a lifetime. It's also because every component in an Airstream fits through the door. That means any maintenance or renovations can be taken care of without taking apart the entire travel trailer.



Drifting Off in Comfort

Next, all bedroom furniture is installed. Airstream uses only comfortable pillowtop memory foam mattresses, and they're custom-shaped to fit the contours of the travel trailer. This is a mattress that will have you rested, recharged, and ready for the next day's adventures – for years to come.

Most Airstream bedrooms are also outfitted with a large custom-built wardrobe, USB and 110V outlets, and entertainment options like a television and sound system.

Because our travel trailers offer so much comfort, it's not uncommon for owners to use their Airstream as a “guest house” for visiting friends and family.



Homecooked – No Matter Where Home is Parked

Many Airstreamers love to cook, and our galleys are built with this in mind. Every Airstream travel trailer contains a complete kitchen that's designed for maximum convenience and efficiency. Kitchens include residential-grade appliances, pantries, stainless steel sinks, and storage for pots, pans, and utensils. Each of these components is installed as the finishing touches are put on the new Airstream.

Finally, lounges, chairs, dinette cushions, curtains, and window shades are installed.



Durable and Comfortable Seating

It wouldn't be your home on the road without comfortable furniture to relax on, which is why Airstream uses quality textiles from brands like Ultrafabrics® and Spradling® to craft our seating environments.

All our fabrics are durable, breathable, stain-resistant, and engineered for years of comfortable enjoyment.

They also resist temperature change, which is important to prevent cracking that can occur in cold weather.

Our fabrics are easy to clean and pet-friendly: They won't scratch or stain. Because your four-legged friends should be able to lounge in comfort, too.



Section Summary

In this section, you learned:

- How the inner shell is constructed and insulated
- How interior features like the bathroom and kitchen are installed
- How each Airstream is designed to feel like home





05 Section

Quality Assurance

Your new Airstream is just about ready to hit the road – but first it undergoes extensive quality testing.

Before any Airstream leaves the production line, our Quality Control team performs a series of detailed tests. They look closely at the overall cosmetics of the trailer, make sure all systems are working properly, and test all interior and exterior parts.

Other tests include pressure-checking the LP gas system, filling the drain system to check it for leaks, pressurizing the water system, testing the tank monitoring system, heating the furnace, and cooling the refrigerator. Finally, the interior and exterior are thoroughly cleaned, and a fresh coat of wax is applied by hand. Only then is the travel trailer ready to leave Jackson Center for an authorized Airstream dealer – and, eventually, its new home!

The Airstream *Warranty*

They've always been made to last. That's why so many vintage Airstream travel trailers are still on the road today.

Wally's dream was to connect ordinary people to the excitement of travel, to take them to new and faraway places without sacrificing the comforts of home. While we strive for perfection, we caution new owners to treat their Airstream just like they'd treat a new home – albeit a home that's towed down the highway.

Your new travel trailer contains complex systems that work together to provide you with all the comforts of home - and if anything needs maintenance, you can rest easy knowing that Airstream provides you with the following transferable warranty:

2 Year Bumper-to-Bumper Limited Warranty

Covering defects in materials or workmanship.

5 Year Structural Limited Warranty

Covering key structural components, including chassis, laminated subfloor, skeletal framing, aluminum sidewalls, front and rear caps and roof.

We also provide peace of mind, with three years of 24/7 CoachNet roadside assistance for your new Airstream travel trailer and tow vehicle, plus technical assistance should you have any questions.





Silver is Green

Each year, Airstream uses over 4 million pounds of flat aluminum to construct our iconic line of products. Countless amounts of rivets, wood, wire, glass, and steel are used too. So what happens to the materials we don't use?

At our production facilities in Jackson Center, bins are used to collect scrap materials. Everything is sorted and anything recyclable is processed locally in order to reduce waste and decrease our carbon footprint. And through a unique partnership with the National Forest Foundation, Airstream offsets the carbon footprint of your first year's travel through our Caravan to Carbon Neutral program.

After an evaluation of our facilities in Jackson Center, Airstream was Certified Green by TRA, an internationally accredited organization that specializes in green building and energy efficiency. **Airstream was awarded with the highest possible rating, the Emerald Award, for resource, energy, and water efficiency and indoor air quality.**



Our Trusted Partners

While we strive to build as much in-house as we possibly can, we also source materials, appliances, and components from some of the very best suppliers in the world. Our Five Rivet Supplier program encourages our suppliers to go the extra mile and provide quality products that will provide owner enjoyment for years to come.

In this way, Airstream builds quality in the DNA of each travel trailer we manufacture. It's that quality that will keep your Airstream out adventuring on the road for years to come.



Section Summary

In this section, you learned:

- About the detailed quality tests performed on every Airstream
- How the Airstream warranty provides further quality assurance
- Airstream's reputation as a leader in green manufacturing
- Some of Airstream's partnerships span half a century or more



Tried and *True*

Our process has stood the test of time, with small improvements made incrementally over decades and decades of fine craftsmanship. The end result is a premium travel trailer that's built for a lifetime of adventure – and meant to be passed from generation to generation.

We've always built every Airstream the right way, even when it isn't the easiest or the fastest way. And we always will. It's our passion and our legacy, and it's how we know we're still living out Wally Byam's vision for this company more than 90 years after the first Airstream rolled off the line.





Don't Stop, Keep Right On *Going*

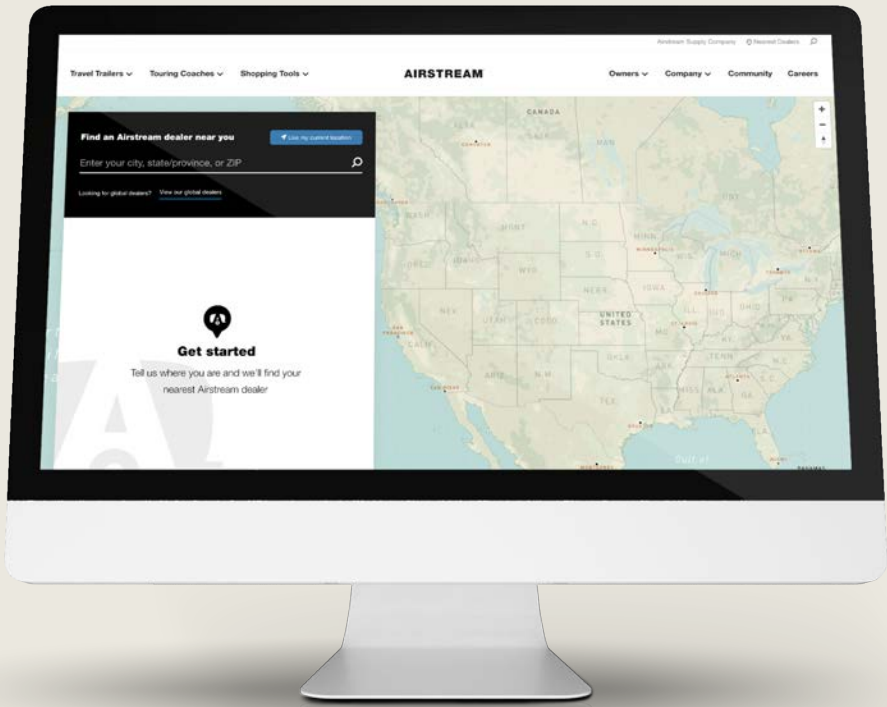
“Hitch up your trailer and go to Canada or down to old Mexico. Head for Europe, if you can afford it, or go to Mardi Gras.

Go someplace you’ve heard about, where you can fish or hunt or collect rocks or just look up at the sky. Go see what’s over the next hill, and the one after that, and the one after that.”

-Wally Byam

[Visit Your Local Dealer to Tour a Travel Trailer in Person](#)

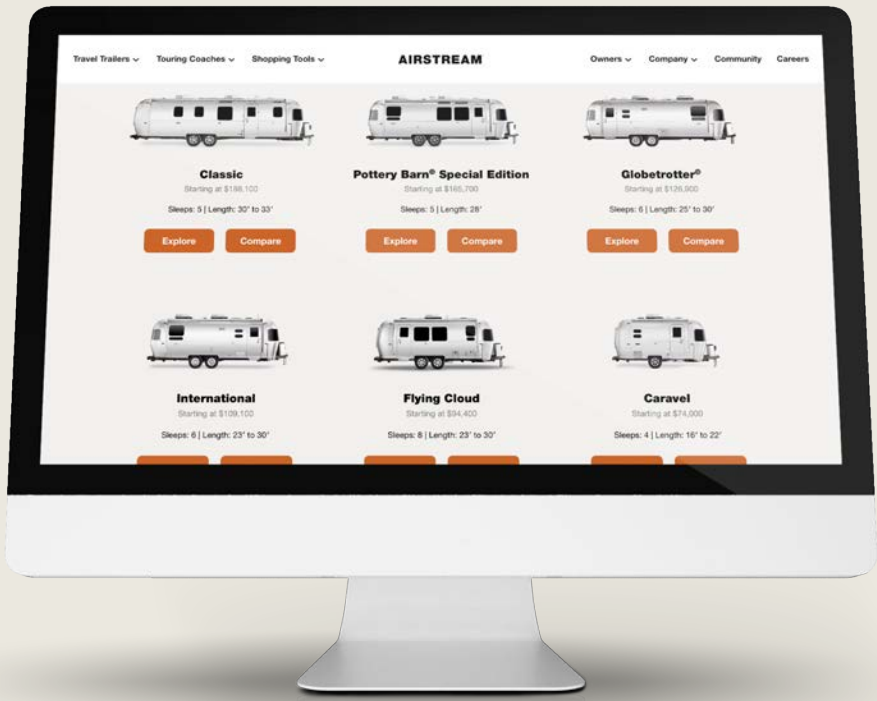
More Questions? We Have *Answers*



National Dealer Network

While you're shopping, you're bound to have specific questions about certain models, features, and more. Whether you're still researching or ready to buy tomorrow, your Airstream dealer is here to help you get the answers you need. [Find your dealer](#) and take a zero-pressure walkthrough in person.

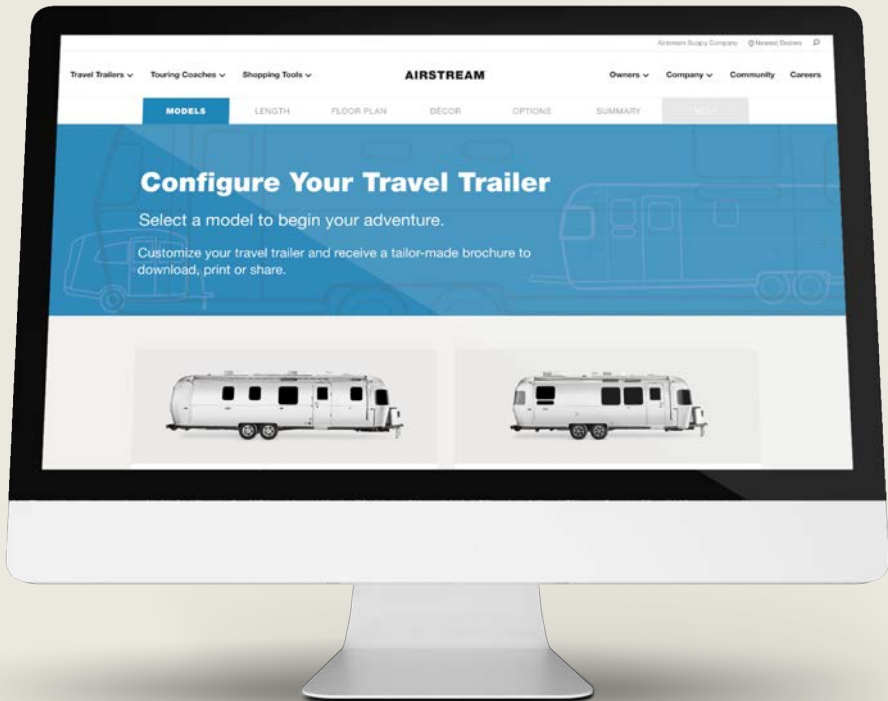
[Find Your Dealer](#)



See All Airstream Travel Trailers

Take a closer look at all the current Airstream travel trailer models and floor plans, and find the right one for you.

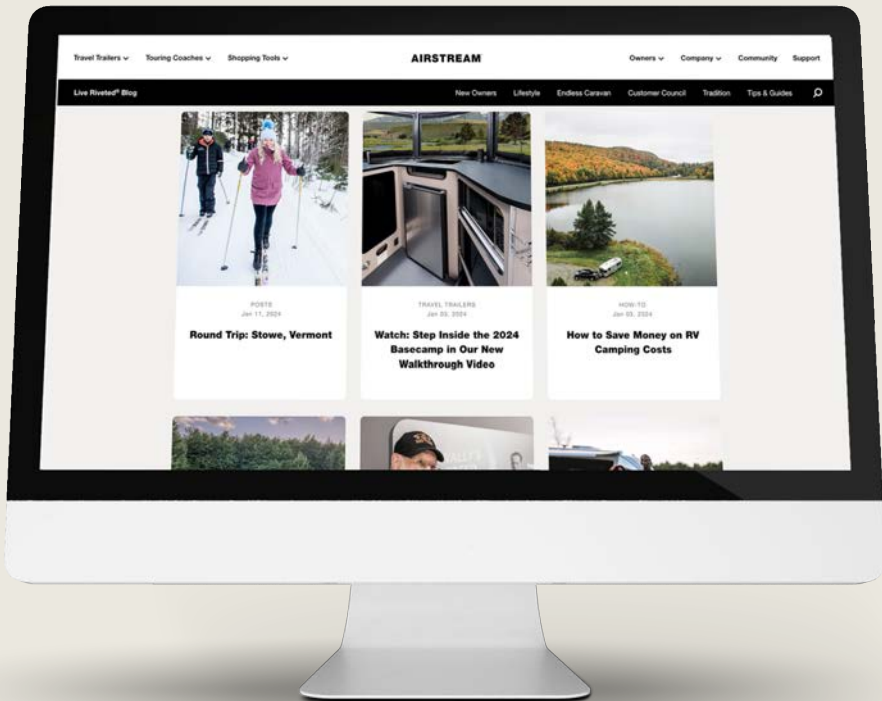
[Explore Travel Trailers](#)



Configure Your Perfect Airstream

Start with any model and choose a floor plan, interior décor, and additional options that feel right for you. When you're done configuring, you'll receive a tailor-made brochure to download, print, or share.

[Configure Yours](#)



Explore Our Blogs

Connect to our community by diving in to our blog, where you'll find compelling stories and valuable perspectives.

[Read More](#)

Discover the World of *Airstream*

Whether you live for quick weekend trips or you're interested in long-term getaways, there's an Airstream that's perfect for your travel style. Visit [airstream.com](https://www.airstream.com) to learn more about our travel trailers and discover the unique features each has to offer. See photos and floor plans, check out features and specs, watch videos, download travel guides, and more.

[Learn More](#)





#LiveRiveted

Thousands of rivets hold an Airstream travel trailer together as it rolls down the highway. Likewise, our community of travelers, adventurers, and explorers is held together by our desire to live every moment to its fullest. So, what are you waiting for? Learn more about Airstream and discover how you can embrace the freedom and Live Riveted.

Find your Travel Trailer at [Airstream.com](https://www.airstream.com)

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