

FLATBED / DECK TRAILERS

FLATBED TRAILERS

TECHNICAL SPECIFICATIONS

LATEST PROJECTS

CATALOGUE & USER'S MANUAL

General Technical Specifications for Flatbed Trailers

Flatbed trailers are essential for transporting heavy, oversized, or irregularly shaped cargo. Their open, flat platform provides maximum flexibility for loading and unloading, making them ideal for a wide range of industries, including construction, logistics, and manufacturing. Below is an overview of the typical technical specifications for flatbed trailers, ensuring they meet the performance, safety, and durability requirements for heavy-duty transport.



1. Dimensions and Capacity

Specification	Details
Length	Standard lengths range from 12 meters to 27.5 meters, depending on the model and customization.
Width	Standard width is 2.55 meters (102 inches), but custom widths can be made available for oversized loads.
Height	Standard height is 1.5 meters, customizable depending on the trailer's intended use.
Deck Height	Common deck height is between 1.2 meters and 1.45 meters, adjustable for specific loading needs.
Gross Vehicle Weight (GVW)	Varies between 30,000 kg to 50,000 kg (66,000 lbs to 110,000 lbs), depending on the trailer configuration and axles.
Payload Capacity	Payload capacity typically ranges from 18,000 kg to 45,000 kg (40,000 lbs to 99,000 lbs).

2. Chassis and Construction

Specification	Details
Frame Material	Constructed from high-tensile steel for maximum strength and durability. The chassis is designed to handle heavy loads, with the steel providing superior performance under stress.
Decking Material	Made from hardwood, steel, or reinforced steel plating to provide strength and load-bearing capacity.
Cross Members	Made from steel, spaced to support the decking and ensure even load distribution.
Suspension System	Available in air suspension, mechanical suspension, or hydraulic suspension, providing options for different transport needs and cargo types.

3. Axles and Wheels

Specification	Details
Axle Configuration	Available in tandem (two axles), tri-axle (three axles), and quad-axle (four axles) configurations to handle varying load capacities.
Axle Capacity	Each axle can support between 9,000 kg and 16,000 kg, depending on the trailer's design and application.
Brakes	Air brake systems with drum brakes or disc brakes, designed for safe and efficient braking in various load conditions.
Wheels and Tires	Equipped with durable steel rims and high-performance radial tires, often rated for 385/65 R 22.5 or 11R22.5 size tires.

4. Loading and Unloading Features

Specification	Details
Loading Method	Designed for side-loading, rear-loading, and top-loading for increased flexibility when handling large or oddly shaped cargo.
Tie-Down Points	Equipped with stake pockets, side rails, D-ring tie-downs, and twist locks to secure cargo effectively during transit.
Winch	Optional manual or electric winch for easier loading of heavy machinery or oversized items.

5. Electrical and Safety Features

Specification	Details
Lighting System	24V LED lighting system with side lamps spaced every 2.5 meters for improved visibility and safety.
Reflective Tape	High-visibility reflective tape placed on sides and rear for night-time visibility and road safety.
Safety Markings	Complies with ADR and DOT standards for safety markings, including reflective crosses and velocity plates.
Parking Brake	Equipped with spring-actuated parking brakes for added safety during stationary operations.

6. Customization Options

Specification	Details
Extended Lengths	Customizable lengths available, ranging from 12 meters up to 27.5 meters depending on transportation needs.
Drop Deck Configuration	Optional drop-deck for lower deck heights, ideal for taller cargo or specific loading requirements.
Side Rails/Fenders	Side rails and fenders can be added for better cargo containment and protection.
Toolboxes	Lockable toolboxes for secure storage of equipment and tools.
Suspension Upgrades	Upgraded air-ride suspension systems for transporting sensitive cargo that requires smoother rides.

7. Maintenance and Durability

Flatbed trailers are built for long-lasting performance, but routine maintenance is essential for optimal operation:

- **Tire Maintenance:** Regular tire inspections and pressure checks are necessary to ensure safe transportation and maximize tire lifespan.
- **Brake System Checks:** Periodic inspection of the brake pads, air brake lines, and braking system functionality is crucial to maintaining safety.
- **Suspension Inspection:** Regular checks for wear in suspension components such as airbags, leaf springs, and shock absorbers help ensure stability and load distribution.
- **Frame and Deck Checks:** Inspections for cracks, rust, or structural damage on the frame and decking should be conducted regularly to maintain trailer integrity.

Essential Semi-Trailer Maintenance for Long-Lastin...



Semi Trailer Maintenance Guide (/images/technical/semi_trailer_periodic_maintenance.pdf)



([https://www.facebook.com/sharer/sharer.php?
u=https%3A%2F%2Fwww.aluratrailer.com%2Fproducts%2Fsemi-trailers%2Fflatbed-deck-trailers](https://www.facebook.com/sharer/sharer.php?u=https%3A%2F%2Fwww.aluratrailer.com%2Fproducts%2Fsemi-trailers%2Fflatbed-deck-trailers))



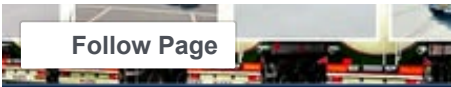
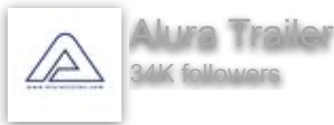
(<https://twitter.com/intent/tweet?url=https%3A%2F%2Fwww.aluratrailer.com%2Fproducts%2Fsemi-trailers%2Fflatbed-deck-trailers&text=Flatbed+Trailers>)



(<https://www.linkedin.com/shareArticle?mini=true&url=https%3A%2F%2Fwww.aluratrailer.com%2Fproducts%2Fsemi-trailers%2Fflatbed-deck-trailers&title=Flatbed+Trailers>)



(<https://www.aluratrailer.com/products/semi-trailers/flatbed-deck-trailers?tmpl=component&print=1>)



OUR ADVANTAGES





(https://www.aluratrailer.com/images/Flatbed_Trailers/alura_extendable_7.JPG)



(https://aluratrailer.com/images/cargobox/drawbar_1.jpg)



(https://www.alura trailer.com/images/extendable/alura_extendable_2.JPG)



(https://www.alura trailer.com/images/48ft_flat/alura_extendable_1.png)



(<https://aluratrailer.com/images/flat/flatbed-grey3.JPG>)



(https://aluratrailer.com/images/bundle_trailers/bundles_alura3.jpg)

WE DELIVER SEMI TRAILERS ALL AROUND THE WORLD



HIGH-QUALITY MANUFACTURING

Our trailers are produced using premium materials like ST Steel, Domex, and Hardox, ensuring durability and performance in the toughest conditions.

CUSTOM SOLUTIONS

We design each trailer to meet your specific transport needs, including axle configurations, body type, and technical features.

FAST & RELIABLE DELIVERY

With our efficient logistics network, we deliver trailers quickly and safely to customers across Europe, Asia, Africa, and beyond.

COMPETITIVE PRICING

Thanks to smart production planning and experience, we offer cost-effective solutions without compromising quality.

GLOBAL REACH

Alura Trailer is proud to serve customers in over 30 countries, supporting global businesses with reliable semi-trailers they can trust.

