

How Wide Is A Shipping Container

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INTRODUCTION: THE SURPRISING ANSWER TO A SIMPLE QUESTION

When you picture a shipping container, you probably imagine a large steel box sitting on a cargo ship or stacked at a port. But have you ever paused to ask yourself: **how wide is a shipping container?** It seems like a straightforward question, yet the answer is more nuanced than you might expect. Whether you are an importer planning freight, a DIY builder converting a container into a tiny home, or a logistics manager optimizing warehouse space, understanding the exact width of a shipping container is fundamental.

Container dimensions are standardized by the International Organization for Standardization (ISO), specifically under ISO 668. These standards ensure that containers can be stacked, transported by ship, rail, and truck, and handled by cranes anywhere in the world. While length and height can vary, the width is surprisingly consistent. But "consistent" does not mean there is only one number to remember. There are differences between **external width**, **internal width**, and **door opening width**, and these distinctions matter for practical applications.

In this article, we will break down every aspect of shipping container width. We will examine standard dimensions, explore variations for specialized containers, discuss how width affects cargo loading and pallet configuration, and answer common questions. By the end, you will have a complete understanding of **how wide a shipping container is** and why those inches matter.

STANDARD EXTERNAL WIDTH: THE 8-FOOT RULE

Let us start with the most universal measurement. Across nearly all standard shipping containers, the **external width is 8 feet (2.44 meters)**. This measurement is consistent for 20-foot containers, 40-foot containers, and even 40-foot high cube containers. The 8-foot width was established to maximize compatibility with existing transportation infrastructure, especially the width of trailers, railcars, and road lanes.

In real-world terms, 8 feet is 96 inches. That is the outside dimension from one side of the container wall to the other. This number has become so fundamental to global trade that it is rarely questioned. However, a fraction of an inch can cause problems when maneuvering a container through a tight space or positioning it on a chassis, so manufacturers adhere to tight tolerances.

Why 8 Feet? A Brief History

The 8-foot standard did not emerge by accident. Early container pioneers, most notably Malcolm McLean in the 1950s, designed containers to fit existing truck trailers. At that time, most US trucks were 8 feet wide. The ISO adopted this as a global standard to ensure intermodal compatibility. Even as trucks and roads have evolved, the 8-foot width remains the bedrock of container design. It is a testament to the power of standardization in enabling modern global supply chains.

INTERNAL WIDTH: THE SPACE THAT MATTERS

While the external width is 8 feet, the **internal width** is slightly less due to the thickness of the corrugated steel walls. For a standard dry van container, the internal width is approximately **7 feet 8 inches (2.34 meters)**, or 92 inches. This dimension varies by a few tenths of an inch depending on the manufacturer and the age of the container, but 92 to 93 inches is the general range.

This difference of roughly 4 to 5 inches on each side might not seem dramatic, but it has significant implications for loading. If you are shipping pallets, for example, you need to know exactly how many pallets can fit side by side. A standard **GMA pallet** (used widely in North America) measures 48 inches by 40 inches. Two pallets placed side by side measure 96 inches total, which is wider than the internal width of 92 inches. This means you cannot fit two 48-inch pallets side by side inside a standard shipping container. Instead, you must turn the pallets or use a different configuration.

Internal Width Variations by Container Type

Not all shipping containers have the same internal width. Here are some common variations:

- **Standard Dry Van (20 ft and 40 ft):** Internal width is typically 92 to 93 inches (7 ft 8 in to 7 ft 9 in).
- **High Cube Container (40 ft):** Same width as standard, but with increased height (9 ft 6 in externally).
- **Pallet Wide Containers:** These are specially designed containers with an internal width of about 96 inches (8 feet). They are less common but are growing in popularity for certain trade routes where pallet efficiency is critical.
- **Refrigerated Containers (Reefers):** These have thicker walls for insulation, so the internal width is narrower, often around 88 to 90 inches.
- **Flat Rack and Open Top Containers:** Width dimensions are generally the same as standard containers, but the open sides or top allow for overwidth cargo that extends beyond the container footprint (though special permits may be required).

When planning a shipment, always confirm the internal width with your container provider. A difference of just one inch can determine whether your cargo fits or requires costly reconfiguration.

DOOR OPENING WIDTH: THE GATEWAY FOR CARGO

Another critical measurement is the **door opening width**. Even if the internal width is 92 inches, the doors may not open to that full width. For standard containers, the door opening width is typically **7 feet 8 inches (92 inches)** at the bottom, tapering slightly to about 89 inches at the top due to the door frame design. This is known as the "door opening width" and it dictates the maximum width of cargo that can be loaded through the doors.

For most general cargo, this is not an issue. However, if you are loading unusually wide items, such as machinery or custom crates, you must ensure they can pass through the door opening. In some cases, cargo may fit inside the container sideways but cannot be loaded because it is too wide to go through the doors. This is a common oversight in freight planning.

HOW WIDTH AFFECTS PALLET LOADING AND CUBE UTILIZATION

One of the most practical applications of knowing **how wide a shipping container is** involves pallet loading. Logistics professionals constantly calculate how many pallets can fit inside a container to maximize space and minimize shipping costs. The width of the container determines the pallet arrangement.

Standard Pallet Configurations

Here is a breakdown of how pallets fit inside a standard 20-foot or 40-foot container with a 92-inch internal width:

- **Euro Pallets (1200 mm x 800 mm / 47.2 in x 31.5 in):** Two euro pallets placed side by side measure about 94.4 inches, which is slightly wider than 92 inches. As a result, they do not fit side by side in a standard container. They must be loaded lengthwise or in a staggered pattern.
- **Standard GMA Pallets (48 in x 40 in):** Two pallets side by side (48+48=96 inches) exceed the internal width. However, if you turn one pallet 90 degrees so that the 40-inch sides face each other, two pallets can fit side by side (40+40=80 inches) with room to spare. This is often called "pinwheeling" the pallets.
- **Custom or Bespoke Pallets:** Many companies use pallets of non-standard sizes. If you design your own pallets, knowing the internal width of 92 inches allows you to maximize floor space. For example, you could use pallets that are 44 inches wide, allowing two to fit side by side with a small gap.

The internal width also influences how many pallets can fit along the length of the container. A 20-foot container has an internal length of about 19 feet 4 inches (232 inches), so you can typically fit 10 GMA pallets (40 inches deep each) with some space left over. The combination of width and length determines the total pallet count.

Cube Utilization and Cost Efficiency

Shipping costs are often calculated by volume (cubic meters) or weight, whichever is greater. If you underutilize the width of the container, you are paying for space you are not using. This is why **pallet-wide containers** are becoming more popular for certain lanes. With an internal width of 96 inches, these containers allow two standard GMA pallets to fit side by side without turning, significantly improving load efficiency. The external width remains 8 feet, so these containers can still travel on standard trucks and ships.

WHAT ABOUT WIDER AND SPECIALIZED CONTAINERS?

While 8 feet (external) is the global standard, there are exceptions. The most notable is the **53-foot container** commonly used in North America for domestic trucking. These containers have an external width of **8 feet 6 inches (102 inches)** and an internal width of about 100 to 101 inches. They are designed to maximize trucking efficiency on US highways and are not typically used for ocean shipping (though they are intermodal for rail and truck). The extra width allows for better pallet fit and higher cube utilization.

Other specialized containers include:

- **Flat Rack Containers:** These have collapsible sides and are used for overwidth cargo. The base width is still 8 feet, but cargo can extend beyond that with proper permits and markings.
- **Open Top Containers:** Similar to flat racks but with a soft top. Width restrictions apply to the base, but overwidth cargo can be secured on top.
- **Tank Containers:** Used for liquids and gases. The width is typically 8 feet, but the cylindrical shape means the effective width for cargo is less.
- **Off-Size and Custom Containers:** Some specialized containers are built for specific industries, such as aerospace or heavy machinery. These can vary in width, but they are not standard and often require special handling.

MEASURING WIDTH: TIPS FOR ACCURACY

If you are measuring a container yourself, whether for a project or for shipping, keep these points in mind:

1. **Use a steel tape measure** for accuracy. Fabric tapes can stretch and give misleading readings.
2. **Measure at multiple points** along the length of the container. Older containers may have slight bows in the walls due to stress or damage.
3. **Distinguish between external and internal width.** Always specify which one you need.
4. **Check for protrusions.** Some containers have locking bars, rub rails, or corner castings that extend slightly beyond the nominal width. These are usually within tolerance but can affect tight fitsments.
5. **Door opening dimensions** should be measured at the narrowest point, which is often the top of the door frame.

COMMON MYTHS ABOUT SHIPPING CONTAINER WIDTH

There are several misconceptions about container width that persist even among industry professionals. Let us dispel a few:

- **Myth: All containers are exactly 8 feet wide externally.** While 8 feet is the standard, manufacturing tolerances mean that actual width can vary by up to 0.5 inches. Additionally, older containers may have been built to slightly different standards.
- **Myth: Internal width is always 7 feet 8 inches.** This varies by manufacturer and container age. Some containers measure 92.5 inches, while others may be closer to 91.5 inches. Always measure if precision is required.
- **Myth: A 40-foot container is twice as wide as a 20-foot container.** This is false. Both have the same width. Only the length changes.
- **Myth: Shipping container width is the same in all countries.** While ISO standards are global, domestic containers like the 53-foot US model have different widths. Additionally, some

countries use slightly different standards for rail transport, but ocean containers remain 8 feet wide.

The question **how wide is a shipping container** has become increasingly popular as more people explore container architecture. Shipping containers are used for homes, offices, studios, pop-up shops, and even swimming pools. The width of the

PRACTICAL APPLICATIONS: BUILDING WITH CONTAINERS