

T-Slotted Aluminum Profiles

80/20 Inc.

Advantages of T-slot Aluminum Profiles

Moving on from the T-slot concept, let's consider the benefits of aluminum. There are several advantages to T-slot aluminum profiles. Some of the biggest are:

- Strong
- Lightweight
- High strength-to-weight ratio
- Resilient
- Modularity
- Easily machined

All 80/20 profiles come standard with a clear anodize which helps prevent oxidation and corrosion while providing a matte finish.

The Battle of Aluminum vs Steel

Think about the fact that, volume for volume aluminum is one third the weight of iron, steel, copper or brass. Yet it has yield strength of 35,000 psi, which means it is comparable to A36 steel carbon (frequently used in applications such as equipment and machinery supports as well as building frames). Furthermore, aluminum is resilient and can flex under loads or reshape itself after the shock of impact.



80/20 T-slot Aluminum

Modularity is just a part of the many benefits aluminum offers to those looking for an alternative to steel and iron. Other benefits:

- Weighs less than steel
- Corrosion-resistant
- No welding required
- Costs less than steel
- Strength similar to steel
- Machining not required

Aluminum VS Steel

Welded Steel Frame

For the skilled welder, steel can be a viable option but for many it's not an option for many reasons:

- More time and labor
- Welding required
- Machining required
- More expensive
- Needs painting
- One fixed design

