



02/03/2023

How Much Weight Can Each Desk Hold?



By: [Jared Hale](#)

In this article, we'll discuss the maximum weight capabilities of common office furniture as well as some clever inclusions that can increase that number.



There’s only one thing more unsettling than hearing your office desk creak and groan when adding new dual monitors on top. Having your favourite piece of furniture collapse under way too much weight. One thing that could have helped avoid embarrassment and blatant property damage is checking the maximum weight limit before setting up your office space.

So, where can you find information on how much each desk can hold?

In this article, we’ll discuss the range of weight capabilities amongst the OLG Office Desk range. We’ll also explore some clever inclusions which can increase a desk’s maximum weight capacity in custom projects. By the end of this article, you’ll know the weight rating of our entire range, as well as have some handy tips to increase that limit.

How Much Does a Desk Need to Hold?

The weight of “stuff” we have on our office desks has been slowly decreasing over the years. Instead of heavy desktop towers and bulky, CRT monitors, today’s offices are outfitted with laptops and lightweight, flatscreen monitors. Gone too are the mountains of paperwork and excessive clutter as everything goes digital.

How much weight sits on top of the average office desk?

If we conservatively add up the weights of modern office equipment, we only have about 25 kilograms of gear on our desktops.

The Modern Office		The Office of the 00's	
Item	Weight	Item	Weight
High Performance Laptop (2023)	3.5 kg	Large Form Factor PC Tower	35 kg
2 x 27-inch Monitors	11 kg	20-inch CRT Monitor	23 kg
Dual Monitor Arms	7.5 kg	Accessories + Cables	5 kg
Accessories + Cables	3 kg	Paperwork	5 kg
Total	25 kg	Total	68 kg

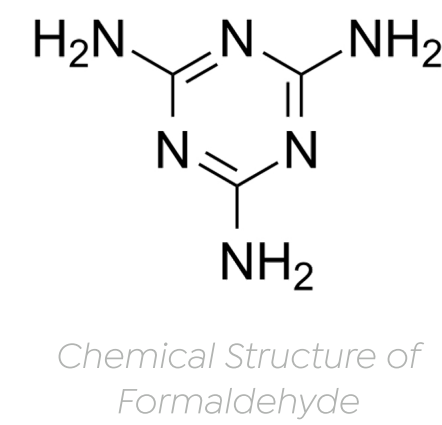
Obviously, a desk needs to be engineered to withstand much more than this, but it is important to note just how little we actually need from day to day.

What Determines a Desk’s Maximum Weight Capacity?

A desk’s weight capacity determines how much weight it can hold without breaking or damaging the desk. Several engineering factors go into an office desk’s maximum weight rating, and understanding these factors can help you select the right desk for your needs.

Construction Materials

The materials used in a desk’s construction play a critical role in determining its maximum weight rating. The majority of commercial office desk frames are made from steel or aluminium with a polished alloy or powder coat finish.



Chemical Structure of formaldehyde

When it comes to tabletops, they’re often built from wood, metal, or a synthetic composite like MDF or particleboard. A wood veneer or laminate finish completes the look, giving it that smooth, clean surface we’re all familiar with.

At OLG, our tabletops are coated in a melamine resin, a polymer from the formaldehyde family. This coating adds heat-resistant and fire-retardant properties to whatever materials it is applied to. As melamine resin contains formaldehyde, a potentially toxic chemical to humans, the polymer is graded based on the amount of formaldehyde that it releases over time. The lower the “E” rating, the less formaldehyde is emitted by the product.

An E0-rated melamine coating will release less than 0.5 mg/L of formaldehyde, 1.5 mg/L for E1 and 5.0 mg/L for E2.

SE0	Formaldehyde released is less than or equal to 0.3 mg/1L.
E0	Formaldehyde released is less than or equal to 0.5 mg/1L.
E1	Formaldehyde released is less than or equal to 1.5 mg/1L.
E2	Formaldehyde released is less than or equal to 5.0 mg/1L.

Despite formaldehyde being a toxic chemical, concentrations need to be fairly high to be dangerous. For instance, there is more than 50 times the amount of formaldehyde in a pear than there is in an E2-rated melamine coating!

All of OLG’s desk tabletops feature melamine resin with a rating of SE0 or [SuperEO](#). This newly created standard is the safest available, releasing less than 0.3 mg of formaldehyde per litre.

Engineering & Design

The engineering and design of a desk’s frame also play an important role in determining its maximum weight capacity. Generally speaking, the more support you have attached to the frame, the higher weight it can support. For example, floating desks that are mounted to the wall will have a much lower maximum weight capacity than a four-legged, free-standing bar leaner. Adding structural elements like additional legs or a crossbar will further increase the amount of weight the desk can support.

To put this into a real-world example, the [4-legged Flare Table](#) has a maximum weight capacity of 400 kg. As a general rule, for every leg that you add to the frame, another 100kg of weight can be accommodated.

Standing Desk Mechanisms

The various different standing desk mechanisms can affect how much weight a desk can carry. When you introduce things like telescopic legs, motors, and other systems to your design, you ultimately reduce the maximum weight capacity.

In saying that, a dual-motor standing desk can operate under a heavier load than a single-motor standing desk. For example, the single-motor [Quick Stand](#) desk has a maximum weight capacity of 80 kg whereas the dual-motor [Agile+](#) desks can carry up to 160 kg.



Custom Desk Arrangements

Occasionally, OLG has been involved in the design and creation of [bespoke products](#) for customs with complex requirements, many of which involve a higher weight-carrying capacity.

As part of a project servicing an educational facility, a client requested a large boardroom-style table that was also wheelchair-friendly. Normally, these tables have a fixed clearance which is too low for wheelchair users. Our solution involved creating a custom six-column table design with height-adjusting motors. This allowed the large table to accommodate a large number of people with varying ranges of mobility.

Thanks to the inclusion of two additional legs, several support crossbeams and six motors, this custom table had a maximum weight capacity comparable to a fixed table of the same size.



The Beast



We're Only a Phone Call Away.

If you're looking for a standing desk for your next project or product line there are a [few different types](#) to choose from. Feel free to give us a call at [02 8188 2732](tel:0281882732) so we can discuss some options.

Want to keep reading? Find out [what's new with OLG](#) or head over to the [OLG Learning Centre](#). There you'll find a curated archive full of educational articles and industry content, all completely free to use.

