



How much weight can air bed take if an air bed could take weight?

As a general rule, Coleman air mattresses don't come with weight ratings, an exception to this is the Aerobed range which are now stamped with ratings dependent on the size of the bed.

But there is a distinct lack of weight bearing guidelines when it comes to a Coleman Quickbed or Dura Sleep mattress.



## What are the weight ratings of Coleman air mattresses

The question has therefore been raised a number of times: *What are the weight ratings on Coleman air mattresses?*

In the interest of keeping our customers informed, we embarked on a widespread research project. We armed a research monkey with pen and paper, phone and 25 minutes of research time to come up with an answer.

The data produced from this project, despite being relatively dull does instil confidence in the Coleman air bed range.

## Our contact at Coleman HQ had this to say:

*"We do test our airbeds to withstand up to 300kg (based on queen size) however don't claim this on the packaging. The testing we focus on is more around pressure test / leak test / weld test etc. as well as weight testing."*

Further to this, a more official response was:

*"All Coleman airbeds are 100% tested – fully inflated for 24 hours, weight tested (static and dynamic up to 300kg) as well as pressure tested. We are so confident in the performance of our Quickbeds we provide a 'guaranty not to leak.'"*

## Let's do the maths...

Now I'm no physics genius. This is the first time I have had to recall Newton's laws of motion since high school, but I'm pretty sure the formula goes something like this:

300kg of weight is roughly equal to 3000 newtons of force, and let's assume we have a camper weighing in at 80kg.

Newton's second law states that:  $\text{force} = \text{mass} \times \text{acceleration}$

$3000 = 80 \times \text{acceleration}$ , which, if my memory serves me right, is jumbled around like this:

$3000 / 80 = \text{acceleration}$ , which means our 80kg camper would need to be accelerating at 37.5metres per second squared towards the airbed to generate 300kg of force.

## Does anyone else want to weigh in?

Now I could be wrong here, so I will not be offended if anyone with a sound knowledge of physics can jump in to better explain this.

I'm confident in saying that it is going to take some serious physical activity on a Coleman air mattress to find its weight limitations!