Drawer Slide installation Guide

This document is to help you the buyer/seller work out and recommend the right slide for the application required.

When considering how many drawer slides there are available in the marketplace today, many people believe that it is as simple as saying "Well my item weighs X so therefore I only need slides that will take this weight"

This is not accurate.

Slides and slide weights are based on the following formula:

Max weight x 500mm Long x 500mm wide

Once you have stepped out of these guidelines you either need to rethink your application or choose another style of slide.

Let's look at an example....

You have an object that weighs 90kg and is 700mm long and about 600mm wide. You would need a slide that will be able to exceed 120kg in load capacity at 700mm as the weight is heavier than the length. Why is this? When a drawer slides extends gravity must also be taken into consideration when considering weight, the further you go from the fixed point the weaker the slide will become.

So what would we recommend for this application?

We would suggest you look at a slide that can exceed 160kg and above, simply because the amount of down force this object would generate is exceeding 125kg.

However; should you have a generator or item that is heavier, closer to the pivot point, then a slide capable of carrying 125kg would be sufficient.

It is very tricky to get slides right, however we always suggest to over-estimate than under estimate the slide needed for an application.

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It is also commonplace for people to also believe that doubling up on slides can solve a problem to achieve the weight bearing capacity required. In some instances this would work, but we do not recommend this as your first choice of solution. As yes this would certainly in some cases make for a cheaper solution but not the right long term solution.

When look to double up on your slides in these type of situations slides work a lot like hinges in that if you get the spacing wrong between them, you will have achieved nothing in that the drawer will still sag, so spacing is everything.

Understanding what a drawer side can do.

It is very important that you understand that drawer slides are not the be all and end all of sliding products. You need to think that drawer slides work very much like a human arm, when you look at the mechanics of them.

The 1st arm as shown above is like your shoulder joint, it is where the actual carrying weight is calibrated for a slide. The second arm in the slide is equivalent to the top part of your arm, and the 3rd part is the equivalent to your forearm.

In understanding this principal when looking at the weight of an object, if you hold the object close to your chest it weighs nothing but the actual weight of the object. However; the further you take the object from the chest/shoulder joint the heavier the object becomes and the greater amount of strength is need to be able to hold the object.

So Appling this logic to a drawer slide if the object weights 80kg at the joint, by the time you have extended you arms the same 80kg feels like hundreds of kilos and becomes unstable. The same applies to drawer slides.

So to summarise if a drawer slides is calibrated to, and manufactured to a specific weight, you must calculate what the weight of the object or drawer will weigh at the further EST point, not it's actual dead weight.

Locking lever tabs are always pressed in a downward motion,
Counter sunk screws are used to ensure ample clearances are achieved.
Important: Incorrect selection of screws could damage the slide locking / moving parts)

How to look after your slides when installed.

Once you have installed your slides, you need to consider how long will these slides be open for. We always recommend that if slides over 1mt in length are used and will be open for long periods, a stand should be installed to assist in the load bearing of the extended slide.

Slides are to be used to slide objects in and out but are not designed to hold object in the open position for long periods of time, because like a human arm eventually they will sag and get sloppy.

If you use your slides in Motor homes or Camper trailers, or any other environment that can introduce these slides to harsh or rough environments we recommend servicing your slides as you would a car.

The correct way to maintain your slides is;
1. Open the slide and with a clean cloth wide down the tracks.
2. Spray the slides with WD40
3. Open and close them a few times to let the lubricant clean all the bearings.
4. Apply Molybond grease or heavy grease to the track and open and close a few times Vaseline can also be used.

We recommend this to be done at least once a year or after a trip where the slide have been exposed to harsh conditions.

Well looked after slides will last for ages and will exceed your expectations!

Understanding the weights of slides.

When looking to buy slides you will notice that there are many weights on offer, you must however look at the formula we spoke about earlier when choosing your slide.

I will give some examples.

1. 45kg slide are rated at this weight based on a 500mm long slide
2. 90kg slides are rated at 500mm installed and extended
3. 100kg slides are rated at 450-500mm full extended
4. 125kg slides are rated at this weight only at 500mm extended

Anything above this weight category is rated only at 450mm.

Once you go passed the max weight size for every 100mm there is approx a 10% drop in the weight bearing capacity for any slide.

We also recommend also come back one step (100mm) if your slides are being used in trailers as they get shaken around a lot more.

Any slide that is used in a road vehicle must also have a variance of 15% of total weight carrying capacity either way as the constant bumps and niggles will make the bearings shift in their cradle.

I.E if your object weight 70kg and is only 600mm long you can use either a 125kg, 160kg or above slide.

When installing your slide take great care in making sure that they are as level and as parallel to each other as possible, a variance of 2.5% is acceptable in any direction. However greater than this will result in the slides not being true and a rough running slide.

This document is just a guide to help assist you in choosing the right slide for the application that you require,

Concept fasteners will not take any responsibility on customers applications for these drawer slides. Slides should never be used as a pull out step platform or any application supporting human weight as injury may result,