



Body: straight load or angle load?

This choice is really down to your personal situation and preference. The most obvious reason to buy an angle load float is that is gives you ability to transport three horses without the hassle and cost of maintaining a horse truck. Bear in mind that angle loaders are not designed to have the horses' weight over the wheels, however, so they place more weight on the draw bar. This might bother you if you don't always, or often, take three horses: with only one horse on board, you may find that he or she can only travel in the last stall because of the weight on the towing vehicle if it stands further up the float.

Some riders buy angle loaders for nervous travellers, because when the dividers are pushed to one side, the space looks bigger and more inviting. The horses can also be turned and led off an angle loader, rather than backing off.

A big disadvantage of an angle loader is that horses are much harder to access once loaded than in a straight body float, where the front door enables you to get to either horse without taking them off. In an emergency involving an angle loader, in contrast, you might have to move the first horse or two in order reach the horse at the back.

Perhaps the best argument for a straight load float is that horses naturally stop by planting their hooves and bracing against forward momentum, so when facing forwards they can better brace against a towing vehicle's braking force.

CAUTION: The stall length in some angle loaders is too short for large horses. It's important your horses can move their heads and necks freely while travelling,

both in order to balance, and so they can lower their heads to clear his throat of mucus and debris. Being unable to do so (especially on a long trip) can be a cause of equine pleuropneumonia, or 'travel sickness'.

Construction materials
Focus on quality – while it is
tempting to go for all the fancy
extras, if you have a strict budget it's better
to put your money into a solid, lowerspecced float. Cheap floats are cheap for a
reason; cost-cutting happens where it's not
visible on the first inspection.

Your options are steel, aluminium, fibreglass or a composite of the same. Steel is durable, economical and flexible; it conducts heat less well than aluminium, so will stay cooler for longer than one with an aluminium body.

Coloursteel cladding, used on the roofs of many houses, is built for New Zealand conditions and doesn't need painting.

Regular steel must be painted, and touched up if it's damaged, as it will rust if exposed to the elements.

Flexible may sound bad, but this quality in a float body means that a steel float is unlikely to suffer stress fractures or structural cracks.

Aluminium doesn't rust, but can corrode. It is lighter than steel, but also more brittle, so more likely to crack.

Fibreglass is the coolest option, doesn't rust and is very light. It can tend to crack over time, however.

CHASSIS The chassis is the base frame of the float. Ideally, it should be one piece of steel, rather than a rectangle for the main body welded on to the triangular draw bar. It should also be hot-dip galvanised in one piece. Steel that's been galvanised



but later cut and welded together will be weaker in the joins, as this is where rust will appear, which threatens the integrity of the chassis.

Not all steel is created equal. Make sure that the steel used in your float meets the relevant New Zealand standard.

If you have larger or heavier horses, choose a float that is built for at least a 2.4t tow rating, as its chassis and other components will have been designed and built accordingly for heavy loads, with more reinforcement. The chassis should have beams for extra support where the horses stand during travel.

FLOOR The floor of your float is all that stands between your horse and the road, so a quality hard-wearing floor is not something to compromise on.

Horses stamp and rear, which can mean 600kg or more focused on a single point in the floor, and there are plenty of horror stories where horses have put a foot through a weak floor.

Never forget that a warrant of fitness inspection for a float does NOT include checking the floor.

The floor in the picture above was less than two years old when the float was

brought in to Hatton & Lilly, in Kaiapoi, for repair. Lyn Hatton and Deon Lilly took the rubber mat up to discover that the floor had rotted through as moisture had seeped in between the glued-on mat and the untreated bamboo ply. The owners couldn't pull up the mat to dry out the floor, and had no idea the floor was in such a state.

The most common materials for float floors are aluminium, marine ply and treated timber. Most horse owners put rubber matting on top to add shock and noise absorbency, and to help prevent moisture reaching the floor underneath – but make sure your mats are anti-slip and ideally, easily removable so you can check, clean and dry under them.

Aluminium floors are strong, economical, relatively easy to maintain and don't rot, but can become hot in summer, tend to vibrate, rattle and flex, and need to be cleaned and dried regularly to prevent oxidation.

Timber flooring, either 50mm thick H4 treated timber or hardwood, is strong and durable, won't get hot and absorbs shock and noise well. If the planks are laid lengthwise, they will bear the load of stamping, shifting horses well. But it's the most expensive option, and needs an experienced fitter. Timber is also heavy, so it will increase the weight of your float.

Marine ply is designed for humid, wet conditions and resists delaminating and fungal rot. Like timber, it stays cool and absorbs shock and noise well, and it's both lighter and more economical. However, it's less durable, and if moisture does get into it, the wood will weaken.

If you go for a plywood floor, make sure it is New Zealand-made marine ply and not a cheap imitation.

CAUTION: Don't keep your float parked

on grass! It will absorb moisture from underneath. Additionally, the constant wet-dry cycle from dew and rain will cause your tyres to dry rot and crack.

The ramp, springs and latch

for horses than asking them to step up into a float, and for a similar reason it shouldn't be too steep, especially for young horses. A ramp is also important protection once travelling, so it must be high enough when closed to protect the horses inside. The ramp must not be slippery when wet.

Common solutions for this are: **Cleats** Noisy and some horses hate them. They're a necessity for trucks because of the steeper incline, but best avoided for floats.

Rubber Heavy and can be slippery when wet, but looks great and lasts forever. Marine carpet Doesn't last forever but is grippy even when wet, dries easily, doesn't collect moisture and is cheap to replace. Can look tatty as it ages. **SPRINGS** Springs (which make the ramp easier to lift up and down) can be side-mounted or centre-mounted. A centre-mounted spring is safer, as side-mounted springs create a space that horses could put their foot into. However, centre springs can't be adjusted once fitted, and they also offer less lift, so side-mounted springs are far more commonly used.





All models feature class-leading suspension, superb braking and great towing characteristics.

Superior quality, lightweight, innovative, rustproof, safe and quiet - Boeckmann floats are built to last

www.boeckmann.co.nz **f** ph 07 549 2383 or mob 021 0225 5648

46 NZ HORSE & PONY March 2019 **47**

LATCHES To keep the ramp in place when closed, modern tailgate latches are far better than old fashioned trailer catches, or 'drop locks', which can get floppy with use. Lyn Hatton recalls an accident where the float ramp bounced, and the worn drop locks allowed the ramp to open. The racehorses inside smashed their way out on the road to Picton, and one had to be destroyed at the scene.

CAUTION: Drop locks need to be put into the safety position when the ramp is open. Left sticking out they are at exactly the right height to catch a horse's eye or even their jugular vein!

Brakes are a legal requirement for towed loads over 2000kg and can be electric (drum) or hydraulic (disc). The weight of your float once loaded may dictate which system you need.

Towing a load that is heavier than your car without brakes is very dangerous. As Diana Stein from Boeckmann points out, with a two-wheel braked float, you will

end up in trouble if you have a flat tyre on one of the braked wheels. Ideally, get a float with a four-wheel brake system. Electric brakes are compulsory for towed loads of more than 2500kg, and you will need a controller fitted in your tow vehicle for the brakes to work, which comes at an extra cost and needs to be refitted if you change your towing vehicle. Electric brakes can increase wear on the towing vehicle if they are over-adjusted in relation to the load being towed.

Hydraulic brakes can be used up to 2500kg but the float must also have two crossed safety chains or an emergency break-away brake. Hydraulic brakes are either on or off, and therefore relatively unproblematic.

MAINTENANCE: Keep over-run brakes lubricated. This is done by simply pumping grease into the grease nipples. With hydraulic systems, bear in mind that brake fluid does not last forever. Brake fluid by nature absorbs moisture which reduces its ability to do its job, so it is important to bleed and replace hydraulic brake fluid annually.

If there are any doubts about the performance of the brakes, take the float to a mechanic to have the wheels removed and the brakes inspected. Wheel bearings should be inspected and cleaned as per your regular service schedule.

Windows and vents Windows serve a dual purpose of allowing light into the float and appropriate ventilation.

Most New Zealand floats have a non-opening window at the front, with or without a protective grill. Large windows at the front offer what appears to be a super-quick escape route for panicked horses, and if they are too low, horses can't see out of them because they have a blind spot immediately in front of them.

Side windows offer your horse a better view of the passing countryside, and should be opening, to direct fresh air into the horse's nostrils, down their flanks and out the back.

Additional windows and vents are great too, but make sure the latter aren't noisy when they flutter. ■

