

# Self Venting Battery Box

Batteries are a bit like human beings...they don't like being to cold, they don't like being to hot. This need can be helped by building a good home for them. Treat them well they will reward you with efficient power and a long life. The Carbeth battery box is designed to help achieve these conditions.

There is of course a no one size fits all solution but the principals of this design can be applied to a range of needs and battery bank sizes.

The example box is designed to accommodate up to 4 Trojan T105 batteries and fit under a standard kitchen unit. Being designed for indoors use, it has the advantage of helping to provide all the desired good battery care requirements and is accessible for maintenance.

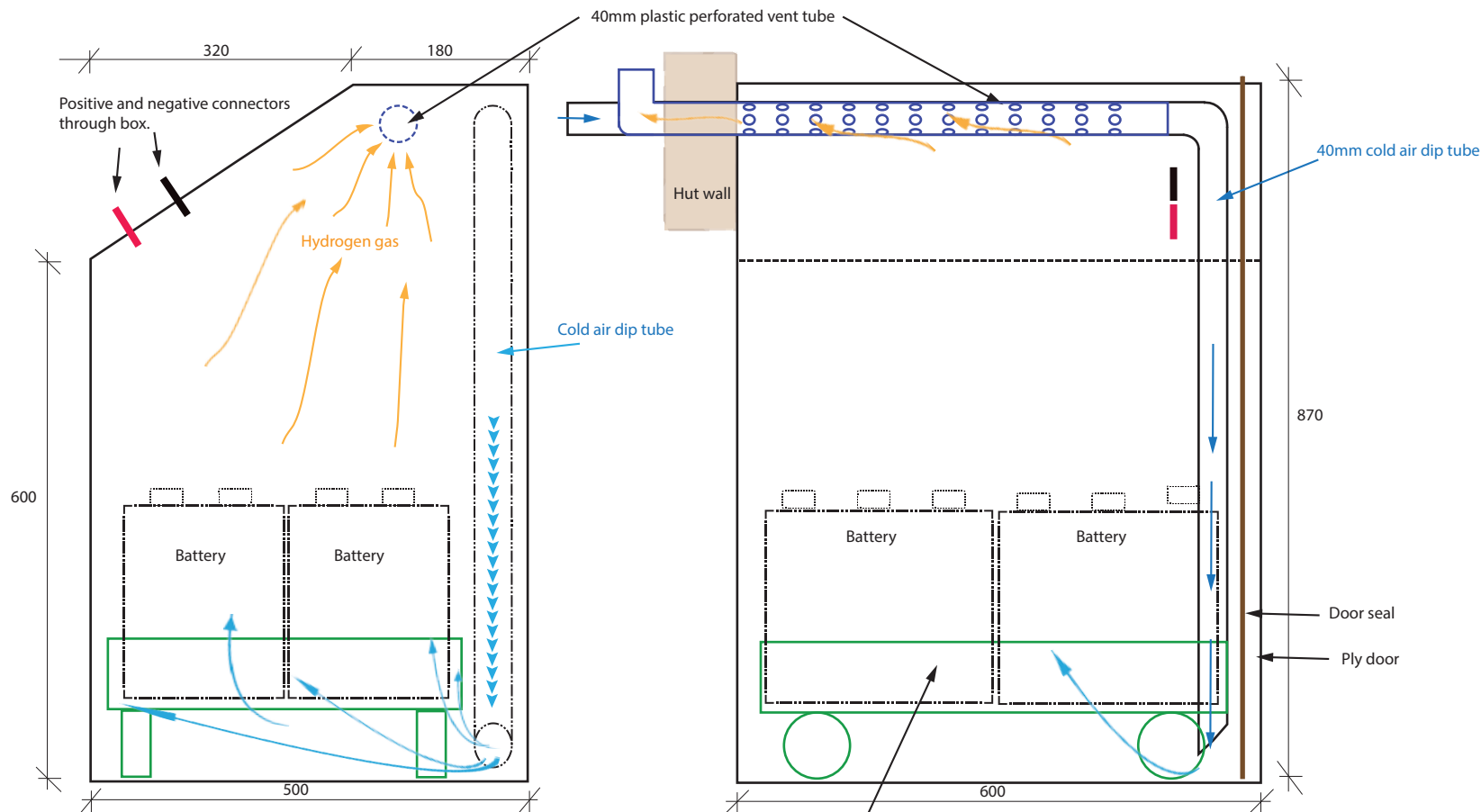
The major disadvantage in recharging lead acid batteries is the production hydrogen gas. In certain concentrations mixed with air explosive limits could be met. Essential in preventing this outcome is a efficient maintainance free ventilation system.

The battery box provides this system by working on then very simple scientific principal. Hydrogen has only around 7% of the density of air. Being much lighter it rises . Cold air is dense and drops. This can be used to set up a natural circulation system that requires no power making it maintenance free.

The box is fitted with two tubes to accommodate this. A venting tube to take hydrogen out and a dip tube to provide fresh air to replace it.



Dip and vent tubes exit through side of hut to exterior Hydrogen gas vet tube turns up at end, cold air tube is a straight exit. Both tubes have mesh covering to prevent insects from entering



5mm ply box. Door can be hinged either side to suit.  
Box can be insulated for enhanced performance  
Door seal made from adhesive backed draft excluder.

Battery tray with heavy duty castors. Batteries can be rolled out for maintenance and checks. Illustrated 4 Trojan T105 6 volt batteries

