

## **How to connect a Firetree Metalworks heater coil to your stock tank**

You will need:

- A [suitable coil](#) (this varies depending on the size of your tank)
- Appropriate [hose](#) (depends on the size of your coil and how close it will be to your tank)
- Appropriate [brass bulkhead connectors](#) (depends on the size of your coil)

1: Place the coil in the desired location relative to the tub. Do a quick safety check. Is it in a sensible place and away from flammable materials and/or foot traffic? If not, adjust and try again. More detailed safety info can be found on our website.

2: Make sure the height of the coil is right and that the warm water return will be below the waterline in the tub at all times. The cold water return should be as low as possible on the tub - even on the bottom of the tub if that suits your setup. The coil can be recessed into the ground for extra height. Likewise the tub can be raised on a plinth. The warm water return can have a slight incline from coil to tub to allow air bubbles to escape the coil and rise up into the tub. If your coil makes a clunking sound, it may indicate a trapped air bubble. Fix heat resistant hose to coil and line up with the tub and use this to find the right locations for the holes in the tub. The heat resistant hose can be trimmed to size as necessary.

3: Mark centre locations of holes with a marker pen, making sure to allow enough room for the bulkhead connectors on the inside of the tub.

4: Drill a 32mm hole in each location with a sharp 32mm hole saw. The type with a pilot bit tends to work best. Optionally you can use a hole punch prior to drilling the pilot hole and this will prevent the hole from wandering. Clean up any sharp burrs with a bit of sandpaper or a file.

5. Affix bulkhead connectors, hose, hose barbs and stainless clips. Use PTFE tape where appropriate. Double check the heat resistant hose has the correct gradient to minimise the chance of an airlock. Minimise sharp bends and kinks where possible to optimise flow rate.

6. Fill the tank with water and check carefully for leaks prior to lighting the fire - especially where the hose connects to the coil. Once the fire is lit, it is common and normal to find water condensing out of the air at various locations.

7. Do a final check for the safety of the setup. Flammable materials nearby? Warm water return below the water line and system filled with water? Any other factors such as dogs or kids? Please be safe 😊

8. Light the fire and enjoy. If you have a problem or a question, call us (the number is on our website).