#### HOMEOWNERS Plumbing Handbook



### MARC STEWART

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**Marc Stewart** 

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This book is normally only available for sale on Amazon as a paperback.

**Today it is free** to you in the hope that if you appreciate this book being free in any way. In return you would consider taking time out to visit by way of Google search for Sangreal on Indiegogo, my crowd-funding project.

And help in any way you can by way of your kind contribution in exchange for one of the many great perks you will find there.

Or if not able to contribute with money doing something just as valuable for us by spreading the word about Sangreal the family dice board game.

Sangreal . . . some do . . . some don't have a beautiful mind!

The following are three testimonials from players recently after filming for the Indiegogo pitch video you can watch to see why Sangreal's time has come with your help!

#### Three Testimonials:

Sue said, "Well I'm really surprised by how much I've learned about you two today, and I think Sangreal's the kind of game that gets you talking to each other".

Bonne said, "Yeah".

Sue said, "And not so much about yourself,

although of course Sangreal's about you,

Sangreal is about what you share, but things a little more than ourselves".

Jenah said, "I learned something about you too".

Sue said, "Ah cool, yeah I love that about Sangreal, it's amazing".

Bonne said, "Sangreal's a game that you can learn from, Sangreal sort of opens up conversations on topics about people that you may know but also things like Sangreal sort of brings in topics that are not that usually spoken about or wouldn't usually or come up in a conversation".

Sue said, "Yeah".

Bonne said, "Sangreal kind of opens up your world, and Sangreal's kind of good though because you get to exercise different thought processes".

Sue said, "Yeah that you wouldn't normally ". Bonne said, "Like the cards you bring out, like you really have to think sometimes".

Jenah said, "Sangreal gives people a chance to say something without prejudice and they can say something honestly they think without people having to go on a huge debate against them or Sangreal's just hearing peoples ideas which is nice"! Sue said, "Yeah, perspective". Bonne said, "I quite like the fact that Sangreal is not competitive, because most games out there are and these games depends on who you play with, it can ruin the game if your playing with someone who is really competitive or is a really bad, you know a poor loser, but because Sangreal's a game where everyone is equal at the same time and that includes everyone when it is your turn as well, Sangreal's quite enjoyable".

Sue said, "Yeah, Sangreal's more ethical, it's the level of co-operation, Sangreal's cool"!

### Sangreal board game ... some

do . . . some don't have a beautiful mind!

For more information about the true depth of the Sangreal project on Indiegogo visit the homepage of my qofs.org website and bookmark it today and tell your friends about it.

And I hope you enjoy your free gift from me to you of this book.

Yours genuinely Marc A Stewart

http://igg.me/at/sangreal

# Gaining access to hot and cold water lines:

Whether for your renovation or for a new addition the procedure for tapping into or extending off existing hot and cold water lines is the same. Choose the type of water line pipe system available at your local plumbers' merchant store. In Australia and New Zealand Secura by Dux industries is preferred. Since the late 1970's early eighties. These poly plastic hot and cold water piping systems have come a long way. And now generally carry a 50-year warranty. You will find either an old poly system or copper or galvanized water pipes in your walls behind existing plumbing fixtures such as your shower, bath, basin, laundry and kitchen. And also under the floor if wooden or overhead in the roof cavity above the ceiling.

Whatever piping material you find we will be redirecting the old lines into new poly crimped brass and copper elbows and tees and adaptor fittings. The first task is to turn off the hot and cold water supply.

# Turning off the water supply:

The cold water supply is usually found out the front on the street or behind each flat or unit, or sometimes inside the basement or garage. If possible test an outside hose tap to ensure isolation valve from street pressure has indeed closed off the flow. In cases where this flow is reduced but not stopped call your local council as these street stop valves are generally still the property of the city you live in and therefore they will attend to any repair needed to bring flow to zero.

Check cold water taps inside the home to find out if indeed turned off. If off. Now run a hot water tap and see if this hot flow has also stopped at the same time. If the hot water taps are still running it means your hot water system is supplied by a low-pressure header tank. And you have a low-pressure hot water cylinder in a cupboard or the basement or up in the attic below the header tank. Or the cylinder may be an older type with the header tank directly attached to the top of the hot water cylinder. After locating the hot water cylinder check to gate valve on the low-pressure cold locate supply line from the header tank into the bottom of the hot water cylinder. If you find such a valve turn it off anti-clockwise and recheck to ensure hot flow has stopped coming out of hot water taps. If you cannot find such a valve near the hot water cylinder or up beside the header tank just keep the hot water taps running until the header tank either in the roof space or on the roof has drained down through the hot water cylinder. This draining down may take about ten minutes.

However if you discovered that the hot water taps stopped running when the cold water from the street stopped running. Then you either have a mains pressure hot water cylinder operating off street cold pressure. Or you have a cold pressure reducing valve low pressure hot water system installed under the hot water cylinder or up in the attic or on the roof since replacing an older header tank, or fitted as new.

#### Please Note:

There is sometimes a low-pressure header tank providing the flow of the cold as well as the hot low pressure to all tap ware and shower valves in the house. If you find you have an equal lowpressure hot and cold water supply system. Either locate the tank above you and turn off its out flowing valves to all pipes or simply test cold water supply to this header tank is off from the street pressure or pump if in a rural area. And drain down through the cold taps.

Whatever you will find will fit into one of these events unless you are on bore water brought up by a pump out of the ground or out of a low supply storage tank by way of a cold water pressure pump. In these cases shut off the pump power supply and close off the isolating valve on the inlet or outlet side of the pump. There are also times when a pump is used to build the pressure up to mains pressure in the home or times or when it is used to provide a fast flow into a higher still equal low pressure header tank or through a pressurereducing valve under the low pressure cylinder for the hot water system. Sometimes by way of a header tank on a tank stand, or in the attic or on the roof.

Once the water hot and cold has been placed under control to off position it is time to remove the old plumbing fixture.

### Removing an old bath, taps and waste trap:

Place a screwdriver end inside the opening of the bath tap and using this leverage with another hand on the top of the tap turn anticlockwise to wind it off and out of the inside the wall wingback elbow. Then repeat for second tap. If there is not enough room to

swing the tap around undo the head works of the tap by removing the top indicator dial and unscrewing the tap body etc. Next go underneath the bath and remove the trap from the end of the waste pipe. If the trap is made of copper or lead and there is no visible thread on the outlet side of the trap just cut this waste pipe some ways back towards its outflow into the main drain. If you cannot physically get under the floor below the bath remove the paneling skirt around the bath and run the top of the trap through with a hacksaw with a 32 teeth to the inch blade. Or if you can undo the top trap nut where it meets the bottom of the plug and washer on the bath than do this.

Now break the entire baths frame accessible and remove bath by first removing wall board above bath as necessary. Now with the bath removed you will be able to get your first good look at what the existing hot and cold water pipes are made of and their respective sizing. If you find galvanized steel piping and you have a concrete floor do not worry. You will be able to purchase a coupling with a rubber seal that can go over the galv pipe down low about 4-inches (100 millimeters) above the floor where you are about to cut them with either a hacksaw with a 24-teeth to the inch blade or the use of a battery or electric sabre saw to ease the workload. However if your new plans allow you another position of your water pipes to begin the running of your new poly pipe work. Then work out how far back into the wall these galv wingback tap outlet elbows are as you may be in a position to block these pipes off at the elbows for good.

If you find your pipe work is in copper. Also cut them both about 4 inches (100 millimeters) above the floor level. And remove the screws and the remaining brass wingbacks that the taps were screwed into.

**Please note:** If the copper pipe is bent or out of perfect roundness anywhere near the cut off point then relocate your cut to further up the pipe then 4 inches above the floor.

Generally you will find two different sized pipes used a  $\frac{3}{4}$ -inch (20 mm) for the hot and a  $\frac{1}{2}$ -inch (15 mm) for the cold line. Whatever you find is ok. There is also the chance of uncovering and striking an unknown pipe type made out of either black or grey plastic. In these cases do not cut the piping until you can establish at your plumbers merchant if they have а comparable match for it to allow an adaptorfitting set-up for this older piping. If worst comes to worst. You will simply have to use the standard industry threads inside where you removed the old tap ware. Still being either 1/2inch or <sup>3</sup>/<sub>4</sub>-inch threading. And if coming off this older piping to either place wingbacks for a new bath position or you are upgrading to a stand up shower or relocating or placing a toilet

or vanity or pedestal basin. Either way there is an adaptor set up you can use. It just pays to seek out the options each existing water piping material gives you before rushing in at it.

# Removing an older vanity basin:

Now if you have removed the bath and you are also removing an older basin then now is the time to do so. Simply remove the basin vanity trap same as you did the bath. Either unscrewing all of it or unscrewing and cutting off the waste pipe or removing the waste pipe altogether if you will not be reusing it.

Next go under the basin and undo the nuts where the tap ware pipes come out of the wall. Or if there are no nuts use a hacksaw.

# Changing the toilet pan and cistern:

Now if you want to change your toilet over to a more modern style or are wanting to move it to another position in the same room or nearby.

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