

# Nailing it! DIY Fundamentals - Follow-up Information

## Hand Tool Essentials - A Basic Hand Tool Kit

This is a list of the contents of a basic toolkit which we feel we could all aspire to:

### Hammer

Best type of hammer for the DIYer is a Claw hammer - one which hits things, and can be used to pull nails, screws etc.

Should be balanced & not too heavy. Usually weighed in oz. (16oz is the most that you are likely to need)

Make sure it is a **one-piece hammer**. Hammers in two parts can be dangerous, as the head could loosen and fly off

Hold it as close to the end as you can.

Let the weight of the hammer do the work, not your arm, or you will tire yourself out.

Hammers we recommend:

[Stanley Fatmax - 16oz](#)

### Adjustable Square/Speed Square

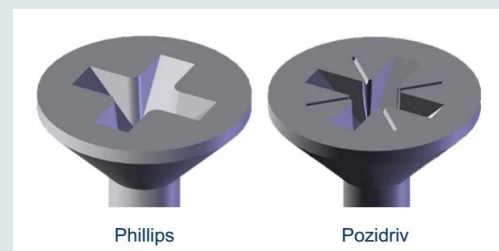
Great tool for measuring things and setting distances accurately.

Also allows you to draw Right angles and 45 degrees

Remember there is a small "Awl" screwed into the handle which is good for marking things. Try not to lose the Awl. (*This is very much a case of "do as I say, not as I do"*)

### Screwdrivers

Difference between Pozi & Phillips is very important to know:



Handle/grip is really important. If you're using the screwdriver for some time, and uncomfortable grip will be painful.

VDE screwdrivers are electrical screwdrivers and should give protection up to 1000V (provided you are holding the handle) NEVER use the small "electrical screwdriver" with a transparent handle on live electrics. It won't protect you. **It does make a great gouging tool!!**

Long-handled screwdrivers are great for getting stuck screws out. The length of the Screwdriver gives you more torque.

Magnetic Screwdrivers are a wonderful invention, particularly if they are long-handled



## Tape Measure

These are very variable in quality. They also have hidden legs, and no homing-instinct. They go missing at every opportunity, so brightly coloured ones give you a fighting chance; probably worth having at least two of them.

Choose at least a **5m** long tape measure. **8m** is excellent, but can be a bit bulky.

If you are measuring internally - make a note of the length of the tape measure case - should be marked on the tape measure, so that you can include it in your measuring

If you are measuring between two points on a flat surface, don't measure from the end, but start at 10cm (100mm). Just remember to subtract 100mm from your final measurement, or you will cut everything 100mm too long - very annoying.

Use the **Push Button Stop** to hold the Tape measure at the length that you need.

Remember that you can use the **Nail/Screw Notch** on the end of the tape measure, if you don't have a helpful person to hold the tape measure while you are measuring.

**MOST IMPORTANTLY - watch your fingers.** Tape measures hurt!

[Ox Metric-only tape Measure](#)

## Spirit Level

Lots of different types: Box/beam/magnetic/torpedo

Good to keep a small Torpedo level in your Tool Bag

2 vials at least is good, particularly the longer you go - annoying to keep moving your body to read it

600mm is a good starter size, but also good to have a small Toolbag level, and a 900mm or even a 1200mm long one.

## Stanley Knife/Utility Knife

Best kind is both folding & retractable - will keep you safe.

Like Tape measures, they always go missing, so bright colours are a great idea.

Many now have storage built into them, so that you can keep a few spare blades with the knife. This is very sensible.

**Blunt knives are far more dangerous than sharp knives**, as you are likely to need to use more pressure to cut things, and therefore could slip and hurt yourself.

Learn how to change the blade when you first get the knife, not when you're under pressure to get a job done. Sometimes it can be a little tricky to get the hang of, so give yourself time, and be safe.

Recommended Utility Knife:

[Ox Retractable Folding Knife](#)

[Ox Fixed Blade Folding Knife](#)

## Saw

Usually extremely sharp when you get them. Try not to lose the guard, if you can.

Remember to use the finger guides to put your index finger on - keeps you more accurate.

Start a cut with a quick couple of sharp pulls. This will create a little groove.

Then relax & let the saw do the work - **the saw will cut as you push forwards, NOT when you pull back!**

Replace frequently - safety - if you hit a nail/screw, you will quickly blunt the saw.

**BLUNT SAWS ARE DANGEROUS - THEY WON'T CUT WOOD WELL, BUT THEY WILL SLIP EASILY AND CUT YOU.**

[Predator Tool Box Saw](#)

# Power Tool Essentials

A quick Introduction to Cordless Drills and Impact Drivers

## What to consider....

You can buy a set which contains a Drill and an Impact Driver. However, if you have the funds, we recommend that you don't do this. In order to get a powerful enough Drill to deal with your walls, you will also be sold an Impact Driver which is probably a bit too powerful & heavy for your everyday use.

We recommend that, if you can, you buy yourself:

1. An 18V drill, with a Hammer Drill Function,
2. A separate 10.8V or 12V Impact Driver.

Make sure that the batteries that come with the Drill are not too heavy (Watch out for this, particularly with Makita, who tend to sell larger batteries with their cheaper drills).

## Cordless Drills

Small Cordless drills are very useful. We recommend buying well-known makes because they generally have good components, which are usually a bit lighter and easier to use.

**Always a good idea to read the Manual before you get started, but here are a few useful pointers to help you understand the manual**

They come in different sizes, according to their power. The higher the Voltage, generally the more power they have, and the more versatile they are. However, more power often also means a bit more weight.

### **10.8 Volt & 12 Volt**

Unlikely to have hammer drill function, & probably not powerful to drill into brick/concrete.  
Will be fine to use with Wood & Plasterboard

### **18 Volt**

Should have a Hammer Drill function & be powerful enough to drill into brick & concrete.  
Are often a bit heavier, but will give you the option of different battery sizes. (Their batteries will also be compatible with other power tools in the same brand, which is useful as you build your tool kit)

Remember batteries make the Drill quite heavy, so we recommend using smaller batteries for drills - 1.3Ah, 1.5Ah or 2.0 Ah, if you can.

## The Chuck

The Drill Bit is held in by the Chuck. This turns one way to open, and the opposite direction to close. As it closes, it tightens around the drill bit.

When you get your drill, spend a bit of time practising how this works, so that you can insert a drill bit and take it out easily. Remember to use Gravity to hold the Drill bit in position

We give you more practice doing this on our [Drill Down into Drilling Course](#), and teach you quicker ways to do this.

## Forwards/Reverse Function

Drills and Drivers all have a forwards and reverse function. This is usually a small push button, close to the trigger (operate it with your index finger & thumb)

These usually have arrows on them to give you a bit of a hint about what they do.

(If you have the drill in your hand and are looking down at it from above, it is usually:

**Forwards - Push in on the right**

**Reverse - Push in on the left**

If it is in the middle, it will often act as a lock, and the drill trigger just won't activate. (This is just a safety feature that you find on many power tools)

Its easy to forget that you haven't switched them across, so if you're trying to drill, and seem to be going nowhere, just check whether the drill is turning in the right direction.

## Screwdriver Function

Most Cordless drills have a Screwdriver function - this might be marked with a screw symbol, or may just be numbers.

The numbers denote the "Torque" (Power/Oomph) that the drill will use on the screw. The lower the number, the lower the power. Its good to start on a

lower torque, and then dial it up if it isn't powerful enough.

## Drill Function

Cordless Drills all have a drill function. This is usually shown by a **Drill bit symbol**.

Turn the dial round so that the Drill bit symbol is at the top, or lined up with an arrow.

There is also usually a switch on the top to allow you to switch between 1 and 2. (2 is more powerful than 1)

## Hammer Drill Function

This function usually has a symbol that looks a bit like a Hammer.

This is a more powerful drilling function to allow you to drill into hard walls, such as brick, or concrete block. You shouldn't use this function on wood, or plasterboard.

Basically the drill goes round and hammers at the wall, all at the same time. (If you want to learn all about this function, then come on one of our [Drill Down into Drilling Courses](#), and we'll show you how it works)

## Recommended Brands:

**Dewalt**

**Makita**

**Milwaukee**

**Bosch**  
(**BLUE** professional range, rather than **GREEN** DIY Range)

## Types of Drill Bit

This is a whole area of confusion. Here are some pointers, which will hopefully help you to choose the right drill bit.



### HSS Drill Bits (High Speed Steel)

- Good for drilling into wood/metal.
- Ideal to have sizes 4, 5, 6 for drilling a range of holes, and size 2.5 for drilling pilot holes



### Wood Drill Bits (Brad Drill Bits)

- These are for Drilling into Wood - they have a sharp point to grip the wood.
- Don't use them for anything else.
- Not as versatile as HSS bits



### Spade Drill Bits (Flat Wood Bits)

- For drilling larger holes in wood
- Tend to go blunt quite easily, particularly the cheaper ones.
- The size of the hole that they will drill is written on them in millimetres
- To extend their life, its a good idea to drill a pilot hole first to guide the drill bit through



### Masonry Bits

- These are the Drill bits for using on Brick and Concrete Block.
- They usually have a larger head in a flat arrow shape
- They can be used in the normal drilling function or in Hammer Drill Function
- They come in different lengths, so make sure you choose a longer bit, if you need to drill deeper holes
- Having a size 5, 6 and 8 Masonry Drill bits should cover most of your needs
- If you are drilling into a wall and your drill is struggling, try starting with a smaller drill bit, and working up to the size that you want. This will give less resistance, and the drill won't have to work so hard.



## Screwdriver Bit Holder

- This is designed to hold Screwdriver bits. (There's a clue in the name).
- If you get a magnetic one, it makes your life just that little bit easier, as it will hold the screw on the end - Magic!!



## Screwdriver Bits

- These fit in the Bit holder.
- Often they're colour coded to help you choose between Pozi, Phillips etc.
- Make sure you have plenty of PZ2 (Pozi 2) bits as these will be the ones you mainly need

## Cordless Impact Drivers

These are basically very powerful screwdrivers.

We recommend that for everyday use, you look at the lighter 10.8 Volt or 12 Volt versions of these tools. We find that the 18 Volt versions are often too powerful and unwieldy, even for us.

Instead of having a Chuck (as the drills have), these have a collar which locks the Screwdriver Bit holder in place. Usually you have to pull the Collar out, to allow the Screwdriver Bit to engage in position. When you release the Collar, the Screwdriver Bit is locked in. To remove the Screwdriver Bit, just reverse the process.

Recommended Makes/Models:

[Bosch](#)

Makita

Milwaukee



## Screws and Wall plugs

Choosing the right screw and fixings can be confusing.

**If you are fixing into wood, then the screw should be held very well by the wood itself. No need for a wall plug.**

Generally if you are fixing something into a solid (brick, concrete or stone) wall, you will need a **Wallplug** to hold the screw.

If you are fixing into Plasterboard, then that can be really fraught with difficulties. We will be providing short courses and information sheets to help with that area specifically.

## Screws

There are many different types of screws and it can be very confusing. For your everyday use, we recommend ordinary Woodcrews.

Screwfix sell packs of assorted [Goldscrews](#), which should cover you for many eventualities.

A screw will be described by its:

### Head

Pozi, Phillips (unusual) Torx, Hex, Slotted etc. We recommend that you use a Pozi (PZ)

### Diameter

This is measured in mm

For your everyday use **size 4 or 5 screws** will be perfectly adequate. They will require a **PZ2** Screwdriver or Bit

Smaller (size 3) screws are used for small fittings, and will need a **PZ1** size screwdriver/bit

Larger (size 6) screws are generally used for heavy duty things such as TV Brackets, large radiators etc. and will need a **PZ3** Screwdriver or bit

### Length

Also measured in millimetres - you may find some measured in imperial, so you will just have to do the maths - (sorry, we make no excuse for the fact that counting in 10s is a lot easier than counting in 12s and fractions of inches)

So if you see a screw marked as:

4 x 40 - this means that it has a 4mm diameter and is 40mm long

5 x 60mm means that it is a 5mm diameter screw and is 60mm long

First Rule of Thumb is to throw away any screws/wallplugs provided by a manufacturer. They are often thrown in for good measure, and can be very poor quality, which is very frustrating. They do, however, give a good indication of the type, size and length of fixing that you need, so once you've thrown them away in disgust, go and get them out of the bin and measure the length of them, (or even take them with you when you buy some better ones).

We recommend that you buy yourself good quality screws and wallplugs.

DIY stores can be quite helpful, so don't be afraid to ask. If you go to Screwfix or Toolstation, not only the staff, but also some of the customers are often happy to help you, so get advice, or contact us, and we'll be happy advise you

If you are attaching ordinary weight objects to walls, you will generally need a size 4 or 5 screws.

**The larger the screw, the more weight it can hold**

**The further the screw goes into the wall, the more weight it can hold.**

### Examples:

If you are putting up shelf brackets with 3 or 4 screws in each of them, you may well be fine with a Size 4 or 5 screw about 40mm or 50mm long

If you are putting up a Heavy TV Bracket, or a Heavy radiator, then you may need larger Screws, such as Size 6, which are a bit longer, 50mm or 60mm.

Remember to take into account how far the screw will actually go into the wall.

If it is only going through a very thin bracket, then most of the screw will be in the wall.

If it is going through a thicker piece of wood, then less of the screw will be in the wall, so you may need to have a longer screw.



## Wallplugs

Wallplugs (as the name suggests) go into the wall (brick/concrete) and provide a fixing point for a screw to go into. Cheaper Wall plugs will not hold as well as more expensive Wall plugs.

We always recommend [Fischer Wallplugs](#). (particularly their Duopower range)

For those of you with iPhones, Fischer have the [Fischer Pro](#) on the AppStore to help you choose the correct fixing for the job in hand. (This is very annoying for those of us on Android). We will be working on them to address this!!

### Wallplug Sizes

Wall plugs come in a range of sizes e.g.:

6 x 30mm

6 x 50mm

8 x 60mm

The first number denotes the size of the hole ie the size of the drill bit you should use to get the correct size of hole.

The second number is the length of the Wall plug. We recommend that you drill your hole slightly longer, if you can, to allow any dust left in the hole somewhere to go.

**Size 6 Wallplugs** will take Size 4 or 5 Screws - I know seems confusing, but if you remember that Wallplugs are described by the size of hole that they fit into. It stands to reason that the screws are going to be a bit smaller, or they wouldn't fit.

**Size 8 Wallplugs** will take Size 5 or Size 6 Screws, and are generally provided for heavier weight items.

You may also come across Size 10 Wallplugs for things like TV Brackets, Radiators, Anchor Points for Bike Security - the sort of thing which you hope is never going to come out again!

Generally, you will find that some Size 6 Wallplugs will stand you in stead for most of your DIY Projects

So, we hope that this is a fairly comprehensive follow-up information sheet for our Nailing-it! Course. We won't have covered everything, but its a start.

Remember, we are always on the end of a phone or email, so please, if you need help, or advice, just contact us:

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**Phone:** 0117 462 4161

**WhatsApp:** 07490764877

We will be running many more courses, so please stay in touch. If you haven't already done so, [join our Mailing list](#), or follow us on [Facebook](#), and keep up to date.