

Your Quick Guide to Constructing a Steel Skeleton

Before beginning the construction of your steel skeleton, we strongly recommend you purchase all the appropriate safety equipment for working on a construction site. This should include safety boots and safety goggles or glasses, a hard hat, a high-visibility jacket and ear defenders for when using noisy power tools.

There is a wealth of information available on the internet for health and safety on a construction site, most of which is basic common sense. Our principal piece of advice is to always keep the site clean and tidy. When building a dwelling, we tend to spend more time looking ahead or upwards than down at our feet, so best to make sure nothing is left lying around that anyone could trip over. As an added bonus, a clean site is also more efficient to work in.

The following are the seven steps you will need to take in the construction of your new steel-frame dwelling. For each of these sections we have provided a summary of what will be required, and each flowcode will give you access to more comprehensive, invaluable information.

https://www.youtube.com/watch?v=R0VZMLq_74Q



CLICK HERE

The right tools for the job – included in the information you will be provided when you purchase the plans for a steel-frame dwelling will be a comprehensive list of tools you will need to complete the entire construction process. However, for the frame erection stage, there is only a very short list as the main task will be to connect the individual pieces of the frame together.

Make sure you have the right tools for the job as your frame is the most important part of the dwelling's entire structure.

https://youtu.be/8kx_BZTx2hs



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Site preparation and laying the foundations – here we recommend you use professional contractors. First the site needs to be cleared and then surveyed in order to establish what type of foundations will be needed.

Then the site is cleared, ready for the concrete base and any foundation trenches to be dug where necessary.

Note that any services (water, gas, electricity and drainage) need to be installed in advance of laying the foundations, so that when the foundations are laid, you will have direct connections to them all through the concrete base.

<https://youtu.be/zuwfcVv9Rkk>



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Get your snaplines right – once your concrete foundations have dried, you need to mark out where the frame is going to sit. You can establish the precise location based on the position of all the connections to the utilities as you will know exactly, based on the plans, where in the dwelling each of these will be connected.

The next step is to create snaplines on the concrete. These are called snaplines as it requires two of you to run a length of heavily chalked string along the concrete base where the outside of the wall frame will be. You then tighten the string, lift it up and allow it to snap back into place – leaving a nice clear and straight line of chalk on the concrete. This needs to be done for all external wall frames and it is important to ensure that all lines are at 90 degrees (a right angle) to each other.

<https://youtu.be/tRFEIU3zdlg>



CLICK HERE

Taking delivery of the steel frame – all the wall frames, beams, trusses and joists will arrive on the back of a lorry. As you unload them, check that everything is in the right order. In theory, the last thing to come off the lorry should be the first piece you will use when you start the construction process. In simple terms, you want all the pieces stacked sequentially to match the order of installation.



Get on the phone and invite a load of (capable) friends round to a frame construction party. Four or five people will be enough depending on the overall size of the frame, and this is a great way to make building your new home even more memorable and enjoyable.



<https://youtu.be/MerPhwrbB-c>

Installing wall panels – If you've got your snaplines right, installing and connecting all the wall panels together could not be easier or more straightforward.



<https://youtu.be/Gl8Y2hnVSX0>

Cross bracing – cross bracing is installed to provide extra stability to keep the panels square to each other, and to stop them from racking.



<https://youtu.be/GncoRZO4rAI>

Installing the trusses – once your wall panels are in place, you are now ready to install the roof trusses. Depending on their size, you may be able to manually lift them into place, but for larger and heavier trusses, mechanical machinery will be needed.



Time for an impromptu barbecue and a celebratory drink of something fizzy!

Once you have watched the videos that show how simple and rapid it is to erect a steel skeleton, you should feel confident that you definitely have the DIY skills to build your own home.

