

# Installation Instructions – QuickClamp & DDA Handrail

These instructions relate to the QuickClamp handrail, and the DDA Clamp system

You will need...

- Tape measure
- Battery drill/screwdriver
- String line
- Setting out pegs
- Safety gloves and goggles
- Spirit level
- Selection of clamps
- Post-hole spade or equivalent for digging holes\*
- Cement – suitable for setting posts.
- Cutting equipment if required

*\*not required if mounting handrail onto concrete using base plates.*

**A MINIMUM OF TWO PEOPLE IS REQUIRED TO INSTALL THIS HANDRAIL SYSTEM.**

## Step 1

**QuickClamp** is a versatile, multi-purpose system using malleable cast iron fittings. The flexibility of the system allows complex structures to be assembled in a quick and efficient manner. We would point out that the chosen size/ combination for any application remains completely the responsibility of the customer and any dead and imposed loads applied must be taken into consideration when designing an installation.

**DDA Clamp** is a complete system that has been specifically designed in compliance with the Disability Discrimination Act (DDA), later the Equality Act 2010, and the building Regulations Part M: 2004. All fittings are hot dipped galvanised to BS EN ISO 1461 and tubing is galvanised to BS 1387 providing long lasting resistance to corrosion. Powder coat finishes to standard RAL colours are available on request

Please refer to the Alexandra website for more information on the full range of product components and accessories: [www.alexandrasecurity.com/handrails](http://www.alexandrasecurity.com/handrails)

## Step 2

The main tubes sections come in two lengths: 3.2m and 6.4m, and four diameters: 26.9, 33.7, 42.4 and 48.3mm. Most of the components in the QuickClamp range are available to suit all of these diameters, but you are advised to check with Alexandra before finalising your design. If delivery of the 6.4m length is required, please contact the Alexandra sales office as special arrangements must be made for transportation.

All tube lengths can be cut to size with the appropriate equipment on site.

## Step 3

When arranging your design please remember the following:

- QuickClamp fittings are not suitable for scaffolding
- Vertical tubes must not be joined within the structure, and must instead be continuous lengths, unless there is a clear structural reason for doing so.
- Where the structure is fixed to or mounted on a substrate or other structure, the substrate or other structure must be examined to ensure that its condition is suitable for the additional design loads.
- Particular attention should be given to unusually corrosive environments, or applications where cyclical loads or vibration may be present.
- QuickClamp fittings must not be welded.

- For aesthetic reasons, orientate fittings where possible with grubscrews facing away from bystanders. To minimise rainwater retention, orientate fittings with grubscrews facing downwards or horizontal.
- Always ensure that the finished structure is free from any sharp edges or projections.
- Do not attempt to modify fittings.

#### Step 4

Alexandra suggest assembling the handrail structure flat on the ground to ensure all components and tube lengths are correct and cut to size before attempting to install it.

#### Step 5

Once you're satisfied that all the elements of your installation are correct, you can start by fixing the first base fixing at one end of your structure. While concrete-in ground sockets are available, most handrail structures will be fixed onto existing concrete surfaces using one of the base flange sets available. The pre-drilled holes in all base and wall flange sets vary in size depending on the diameter of tube and application of component, so if there is any doubt on which screw fixing should be used please consult the Sales team at Alexandra.

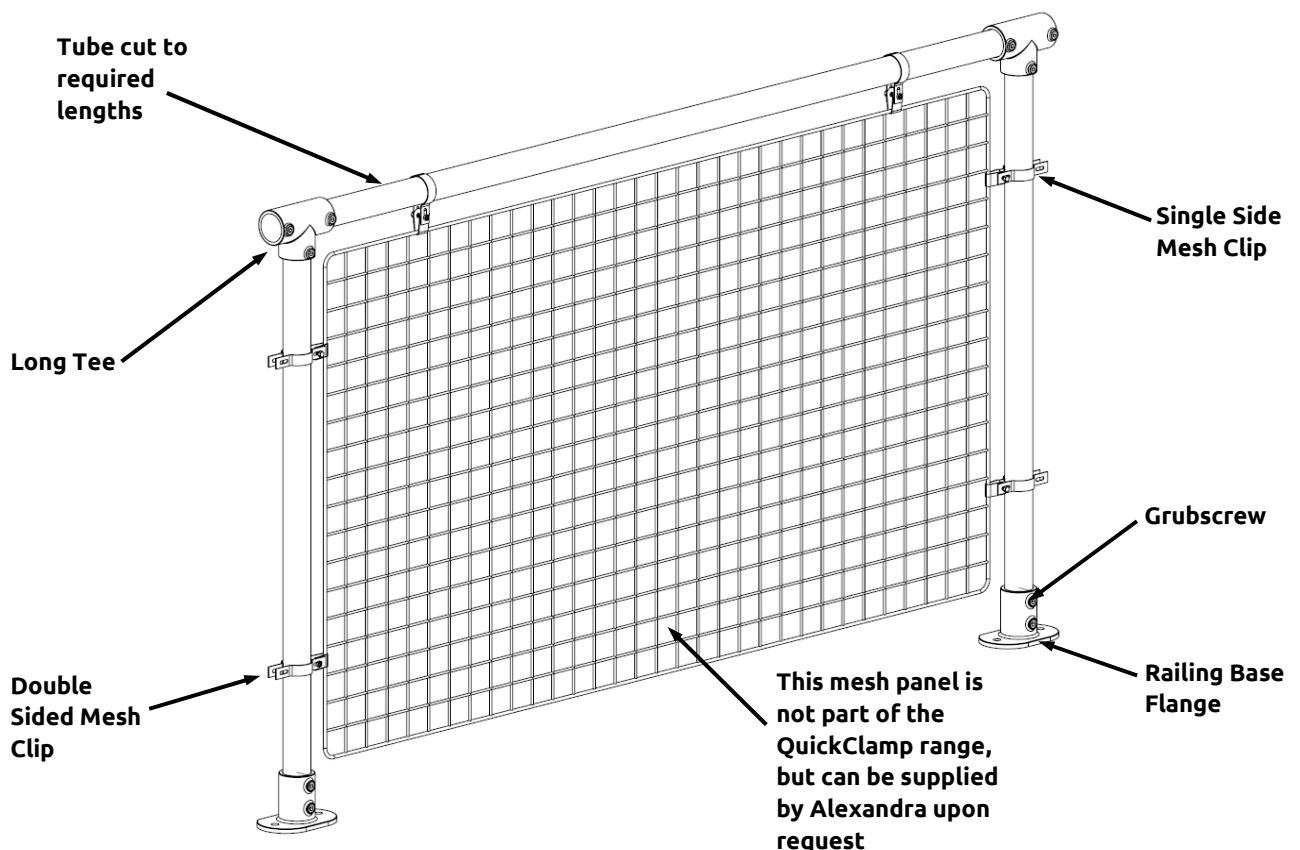
#### Step 6

Use a line to make sure your installation remains straight. Also, any imperfections on the surface you are mounting onto can cause problems when joining components together. QuickClamp is designed to allow for a certain amount of adjustment about the joints, but it is advisable to ensure that all surfaces are as level as possible.

#### Step 7

Your structure should start from the ground up, and proceed from one end of the installation to the other. Where possible, try and keep the grubscrew fixings hand tight until you are satisfied with the structure, when it can be tightened to 40Nm, for which a ratchet wrench may be necessary. Please ensure that this torque is not exceeded.

Example below is for a typical handrail construction.



Alexandra has worked hard to produce these installation instructions for you, but we need your help to ensure that they are as technically thorough as they can be. If you encounter any problems whilst using this document, or can suggest any changes or amendments, please telephone us on: **01892 833 001** or email: **sales@alexandrasecurity.com**