



Unit A2 Fraylings Business Park, Davenport Street, Burslem, Stoke on Trent ST6 4LN <u>www.meshdirect.co.uk</u> | <u>sales@meshdirect.co.uk</u>

# Chain-link Fencing & Post System Installation Instructions

# **Section A: Fittings**

#### What fittings are included with the post system?

The below images show the different component parts of our chain-link post system. The type of brackets you have received will depend on the post types you have ordered.



#### Why do all the posts I've received look the same?

The chain-link post system uses the same Upright Post for all post types i.e. End Post, Corner Post, Twoway Straining Post, Intermediate Post. The Upright Post is tubular and has a row of holes running down the entire length of the post i.e. down the spine of the post.

To transform an Upright Post into an End / Corner / Two-way Straining Post, you need to attach the relevant fittings supplied (as explained in this guide). An Intermediate Post is simply an Upright Post with a post cap, and this post type doesn't require any additional fittings.

#### What fittings do I need for my End Posts / Corner Posts / Two-way Posts?

Set out below is a list of the fittings supplied with an End Post, Two-way Post and Corner Post. Please note that you have fewer brackets and winders for 90cm (3ft) high fencing as you only require two runs of line wire. Additional brackets and winders are supplied with 1.2m (4ft) and 1.8m (6ft) high fencing as you require three runs of line wire.



\* Overall post length for 1.2m (4ft) high fencing is 1.8m; overall post length for 1.8m (6ft) fencing is 2.35m. \*\* Overall post length for 90cm (3ft) high fencing is 1.55m.

# Section B: What are the different fittings for?

Details on how to attach the various fittings to your posts are provided below in Section C of this guide. However, the purpose of each fitting is as follows:

*End / Two-way / Corner Brackets:* Used to convert an Upright Post into an End Post, Two-way Straining Post, or Corner Post. The brackets are used to fix your Winders, Struts, and Stretcher Bars onto the post.

*Struts:* Fixed onto one of the brackets to support your End Post, Two-way Straining Post, or Corner Post. An End Post has one Strut, whereas a Two-way Straining Post and Corner Post have two Struts.

Winders: Fixed onto the relevant bracket and used to tension your supporting Line Wire.

*Stretcher Bars:* Woven in and out of the end of your chain-link fencing roll and bolted onto the relevant brackets to secure the chain-link to your End / Two-way Straining / Corner Post.

# Section C: How to install your Post System

#### Step 1: Positioning your brackets onto your End / Corner / Two-way Straining Posts

It is best to work out the position of the brackets on your posts before you concrete the posts into the ground to ensure that your posts are buried and post-creted to the correct depth.

# Bracket Positioning:



The holes on the arms of the brackets need to line up with the holes in your Stretcher Bars. This will allow you to bolt the Stretcher Bar onto the brackets when attaching the chain-link fencing.

The End Brackets can be attached to the post either way up depending on the direction of your End Post (as shown in these images). The Hex Bolt will secure the bracket into place.

Please note that for 90cm (3ft) chain-link, you only need to line up the bracket with the top and bottom hole on the Stretcher Bar.



**Brackets required for End Post:** 3 x End Bracket positioned roughly at the top, middle and bottom of the "above ground" section of the post (for 90cm high fencing 2 x End Bracket at the top and bottom); 1 x End Bracket positioned approximately <sup>3</sup>/<sub>4</sub> of the way up the "above ground" section of your post to secure the Strut into place.

**Brackets required for Two-way Straining Post:** 3 x Two-way Bracket at the top, middle and bottom of the post (2 x Two-way Bracket for 90cm high fencing); 1 x Two-way Bracket approx. <sup>3</sup>/<sub>4</sub> of the way up the post for the Strut.

*Corner Post:* 3 x Corner Bracket at the top, middle and bottom of the post (2 x Corner Bracket for 90cm high fencing); 1 x Corner Bracket approx. <sup>3</sup>/<sub>4</sub> of the way up the post for the Strut.

Please note that the same bracket is used for left and right Corner Posts, and so the spine of the Upright Post must be positioned on the outside of the fencing for Corner Posts. You can check the Corner Post position by placing the Corner Bracket on the spine of your post, the arms should point in the direction of your fence lines (see image below named "Corner Bracket Positioning").

*Intermediate Posts:* Intermediate Posts are positioned at intervals up to 3.15m along each straight section of fencing. The Intermediate Post uses the same Upright Post as the End / Corner / Two-way Posts, but doesn't require any Brackets, Winders or Struts (only a post cap is required).

# Corner Bracket Positioning:



The spine of the Corner Post will need to be located on the outside of your fencing half-way between the direction of the two runs of fencing you are connecting.

It will be easy to see the required post position by placing the Corner Bracket onto the spine of the post. The arms of the Corner Bracket should point in the direction of your runs of fencing.



#### Step 2: How do I attach the brackets to the Upright Post?

As shown in the above images, the brackets fit onto the spine of the post by sliding the bracket into the spine holes until it is flat against the post. You may need to gently tap the bracket to get it flat on the post using a rubber mallet or a hammer (if using a hammer, we would suggest covering the bracket with a cloth to prevent damage to the powder coating).

Once the bracket is flush against the post, you should tap the arms of the bracket downwards to secure into place. One of the Hex Bolts should then be screwed into the centre of the bracket using a spanner to secure the bracket. Please note that the End Brackets can be used for left or right End Posts, simply turn the bracket upside down to change direction as shown in the *"Bracket Positioning"* image in *"Section C Step 1"* above (when turning the End Bracket upside down, you will need to tap the bracket upwards to secure it into place).

#### Step 3: Post positions

Essentially, chain-link fencing is broken down into a number of straight sections of fencing which are linked together. Each section of fencing will run from one terminal post to another terminal post (a terminal post is a strutted post with fittings, and will either be an End Post, Two-way Straining Post, or Corner Post).

The maximum length we would suggest for a single straight run of chain-link would be around 25m. For straight runs longer than 25m we would recommend using a Two-way Straining Post to break the fence run down into more manageable sections. A Two-way Straining Post allows you to stop the chain-link at the 25m point, and then continue the fencing on the other side of the same terminal post (basically, very long runs of chain-link are broken down into 25m sections, or sometimes 12.5m sections if using heavy duty 1.8m high chain-link).

Chain-link fencing also requires the support of Intermediate Posts, which should be positioned at approximately 3m intervals (you can space the Intermediate Posts closer together if you wish, and can space the posts up to a maximum recommended distance of 3.15m apart). When positioning your Intermediate Posts, please bear in mind that you will need to clip the supporting Line Wire onto the spine of the post as shown in the images provided later in this guide.

As mentioned in "Section C: Step 1" above, extra care should be taken when positioning the Corner Posts, and you should use the direction of the Corner Brackets on the post to determine the exact spine position for Corner Posts (as mentioned above, the spine will need to be located on the outside of the corner – please see "Corner Bracket Positioning" image above).

### Step 4: Burying and post-creting your posts into the ground

When burying your posts into the ground, you need to ensure that you leave the desired fence height above ground to support your 90cm high, 1.2m high, or 1.8m high chain-link fencing. Checking the positions of your brackets, as described above, will ensure that you leave sufficient post above ground for the fittings on your End, Corner or Two-way Straining Posts.

We would suggest that you dig holes approximately 200mm x 200mm wide (or 200mm diameter if using a hole auger). The depth will depend on the height of fencing you will be installing, and positioning your brackets as set out in "Section C: *Step 1*" of this guide will ensure that you leave sufficient post length above ground.

The posts must be concreted into the ground to prevent movement when tensioning your Line Wire and chain-link fencing. As a rough guide, you may require approximately one bag of post-crete per post. However, you should consult with the post-crete supplier for the accurate quantity required.

# Step 5: Tensioning your supporting Line Wire

Once your posts have been correctly positioned and concreted into the ground, the next step is to tension your Line Wire. You will require three runs of Line Wire for both 1.8m high and 1.2m high chain-link, and two runs of Line Wire for 90cm high chain-link.

To tension the wire, you need to attach Winders to your End Brackets, Two-way Brackets, Corner Brackets (please note that a Winder is not required on the bracket used to fix your Struts to the post). Winders are attached using a Roofing Bolt and Roofing Nut and should be fixed to the outer hole on the bracket.



Once you have fixed Winders to the brackets on your starting terminal post (End Post / Two-way Post / Corner Post), and to the corresponding brackets on the terminal post you are running the chain-link fencing to, you now need to tension the Line Wire. The Line Wire is threaded through the hole at the front of the Winder, then through the hole in the Winder barrel and wrapped a couple of times around the barrel. You then need to turn the barrel with a spanner or grips to tighten the wire, as shown in the below images.



locking notch to ensure ratchet effect.

The Line Wire should be run past the spine side of your Intermediate Posts. Once the Line Wire has been tensioned, you use the Single Clip Tool and Clips to secure the Line Wire onto the spines of the Intermediate Posts, as shown in the below image.



#### Step 6: Attaching the chain-link to your starting post

Once your Line Wire has been tensioned and fixed to your Intermediate Posts, the next step is to attach your roll of chain-link fencing to your starting post. It is best to keep the roll of fencing rolled up during this process, as the wires can easily snag if you attempt to unroll the chain-link along the ground and then try to lift it to the posts.

First, you will need to remove the wires wrapped around the roll holding the fencing together. Then, hold the roll of chain-link upright against your starting terminal post (End Post / Two-way Straining Post / Corner Post) and weave one of the Stretcher Bars in and out of each hole at the start of the fencing as shown in the below image. The Stretcher Bar is then fixed onto the same Roofing Bolt used to hold your Winders onto the brackets, and a second Roofing Nut is used to hold the Stretcher Bar into place (as shown below).



Step 7: Fixing the chain-link to the Line Wire and Intermediate Posts

Now that your chain-link is fixed to the starting post, you simply unroll the chain-link along the tensioned Line Wire. As you move along the Line Wire, you should use your Clip Tool and Clips (or your FP222 autoloading hog ring plier if purchased) to clip the chain-link fencing onto the Line Wire as shown in the below image. You should use approximately 3 clips per metre on each run of Line Wire.



The chain-link <u>does not need to be fastened to your Intermediate Posts</u>. You run the chain-link past the Intermediate Posts, and it is only clipped onto the tensioned Line Wire.

**PLEASE NOTE** that as chain-link is a woven product, some of the vertical wires may have twisted out of place slightly during transit. This can be fixed by twisting the wires back into position and ensuring that the loose wires at the top and bottom of the fencing are twisted together (as shown in the below image). This process is simpler if you do this as you unroll the fencing along the tensioned Line Wire.



Step 8: What to do when you get to the end of your section of fencing

At the end of each straight section of fencing, you need to fix the chain-link to the terminal post (End / Twoway / Corner Post). Essentially, you just repeat the above process of inserting the Stretcher Bar and bolting this onto the relevant brackets fixed to the terminal post. To make sure that the fence is rigid you will need to pull the chain-link taut when attaching the second Stretcher Bar, however the end of your run may not correspond exactly with the end of the roll of chain-link and so you may need to shorten / lengthen the roll.

# How do I shorten my roll of chain-link fencing?

As chain-link is a woven product, there is no need to cut the fencing with wire cutters. Instead, you can separate off a section of fencing by untwisting the wires on the diamonds at the top and bottom of the fencing (shown in the above image) with a pair of wire grips. One of the wires will then twist out of the fencing like a corkscrew, which will separate off the chain-link at that point.

# How do I lengthen my roll of chain-link fencing?

If your fencing run is longer than the remainder of your roll, you can attach a second roll of chain-link by weaving the fencing together (this is the reverse of the shortening process). You untwist one of the chain-link wires, as described above, and use the loose wire to weave the two rolls of chain-link together.

# Additional Information:

We have further information in the "*Help Guides*" section of our website on how to deal with different fence shapes / gradients / gates and gaps in the fencing. This information can be found at the following link <a href="https://www.meshdirect.co.uk/how-to-install-chain-link.html">https://www.meshdirect.co.uk/how-to-install-chain-link.html</a>