

Chain Link Fencing

Plan Fence Layout:

1. Measure the length of the planned fence. Decide the height of the fence fabric desired.
2. Locate the number and position for all terminal posts: corner, end and gate posts. Add terminal posts for uneven ground. Either at terraced points or in a set of posts to handle any area where the ground rises or drops more than 15" per 100 feet. Terminal posts should be located 4" within the property to prevent the footing concrete from encroaching onto neighboring property. Gate posts should be positioned from inside post face to inside post face exactly the distance of the gate opening desired. Note: the gate which will fit in a 36" opening is smaller than 36" because it automatically allows for the hinges and latch. Standard single gate openings are 36", 39", 42" and 48". Standard double gate openings are 10 or 12 foot.

Setting Terminal Posts:

3. Posts holes should be 8" in diameter and 18 – 30 inches deep with outward sloping sides. Terminal posts should extend above the ground the height of the fence fabric plus 2".
4. Mark each post with the "ground line" to ensure properly set posts.
5. Make sure posts are plumb, and set at the correct height and then surround posts with a continuous pour of concrete. Trowel finish ensuring concrete slopes away from posts to direct water away.

Locating and Setting Line Posts:

6. After the terminal posts footings have set, run a string between the outside face of the terminal posts 4" from the top. (The height of the fence fabric minus 2".)
7. Measure the distance between the terminal posts. Line posts should never be spaced more than 10 feet away from the next post. If the distance is not evenly divisible by 10 then add an extra line post and divide by that number to find the line post spacing. For example say the distance between terminal posts is 54 feet or 648" divide by 6 (50 foot would require 5 posts so add one equals 6 posts needed) means the distance between posts will be 108" or 9 feet.

8. Dig line posts holes 6" wide and 18" to 24" deep keeping the top of the line post even with the taut string and the outside face even with the terminal posts outside face. Surround posts with a continuous pour of concrete. Trowel finish ensuring concrete slopes away from posts to direct water away.

Add Fittings to Terminal Posts

9. Slip rail end bands and tension bands onto the terminal posts as required. Note: the long flat surface of the tension bands should face toward the outside of the fence.
10. Place post caps on all the terminal posts.

Install Top Rails.

11. Place line post tops on each line post. If off-set tops are used they should point towards the outside of the fence.
12. Insert one length of the top rail through the line post closest to a terminal post. Place a rail end onto the top rail and connect it to the terminal post using a rail end band. Attach using a 5/16" x 1 1/4" carriage bolt with the head to the outside of the fence.
13. Add lengths to the top rail as you go connecting them together with a top rail sleeve. When a full length of top rail is too long carefully measure the remaining distance to the next terminal post and cut the top rail to fit tightly between the last full length and the rail end. Fasten the rail end to the rail band on the terminal post and secure with another carriage bolt.

Hanging Fence Fabric

14. Start at a terminal post and unroll the fabric along the outside of the fence line until you reach the next terminal post.
15. Slide a tension bar through the first row of chain-link diamonds. Fasten evenly spaced tension bands to the tension bar using carriage bolts with heads to the outside of the fence.
16. Stand fence fabric up against the fence frame, taking out some slack and loosely attach fabric to the top rail with a few fence ties to keep it standing.
17. Remove excess fence fabric by opening the top and bottom loops of a single strand of wire with pliers. Unscrew the strand up through the fabric until it separates. When necessary, sections of fence fabric can be spliced together by reversing this process. Sometimes a second strand will need to be removed in order to provide a proper mesh pattern.

Stretching Fence Fabric

18. Temporarily insert a tension bar approximately 3 feet inside the unattached end of the fabric. Fasten one end of the fence stretcher to this tension bar and the other end to the terminal post. A properly stretched fabric should allow for some give when squeezed by hand. Remove the stretchers and the temporary tension bar.
19. Adjust the fabric to the exact length by removing or adding fabric as discussed previously. Fix the permanent tension bar to the terminal post via the tension bands.
20. It may be necessary to cut the chain-link fabric on a bias if the fabric does not create a right angle to the terminal post. (Such as on an incline.) In this case pull the fabric until the shortest part (top or bottom) reaches the terminal post. First insert the tension bar through the fabric so it is parallel to the terminal post. The other corner of the fabric will extend past the post and will need to be cut. Do not cut every wire. Cut strands of wire that form the diamond at the tension bar but be sure to leave them long enough to bend over the bar.

Installing Fence Ties & Optional Tension Wire

21. Fasten the fabric securely with fence ties spaced 24" apart along the top rail and 12" part on each line posts.
22. A tension wire can be use as a bottom rail. This tension wire should run along the same side of the posts as the fabric. Simply wrap the wire around the bottom of the terminal posts or use a rail end band. Twist the wire until it is taut and apply tension wire clips as needed.
23. Tighten all nuts on all rail ends bands and tension bands.

Hanging the Gate(s)

24. Place gate post hinges to the gate post about 8" from the top and bottom. Make sure the top hinge is pointing down and the bottom hinge pointing up. This will keep the gate from being removed. Tighten all bolts.
25. Attach the gate frame hinges loosely so they can be adjusted. Hang the gate so the bottom of the gate has about 2" of clearance. Tighten the bottom hinge. Adjust the top hinge and tighten.
26. Place the gate latch at a convenient height.