

Barbed Wire

Barbed wire, also known as barb wire, is a type of fencing wire constructed with sharp edges or points arranged at intervals along the strand(s). It is used to construct inexpensive fences and is used atop walls surrounding secured property. It is also a major feature of the fortifications in trench warfare (as a wire obstacle).



A person or animal trying to pass through or over barbed wire will suffer discomfort and possibly injury. Barbed wire fencing requires only fence posts, wire and fixing devices such as staples. It is simple to construct and quick to erect by an unskilled person.

Agricultural fencing :

Classic barbed wire Barbed wire fences remain the standard fencing technology for enclosing cattle in most regions. The wire is aligned under tension between heavy, braced, fence posts (strainer posts) and then held at the correct height by being attached to wooden posts and battens, or steel star posts. The gaps between star posts vary depending on terrain. On short fences in hilly country they may be placed every 3 yards (2.7 m), while in flat terrain with long spans and relatively few stock they may be spaced up to 30 to 50 yards (46 m).

Barbed wire for agricultural fencing is typically galvanized for longevity. Its greater strength make fences longer lasting because cattle cannot stretch and loosen it. It copes with the expansions and contraction caused by heat and animal pressure by stretching and relaxing within wider elastic limits. It also supports longer spans, but because of its "springy" nature it is hard to handle and somewhat dangerous for inexperienced fencers.

Gates

As with any fence, barbed wire fences require gates to allow the passage of persons, vehicles and farm implements. Gates vary in width from 12 feet (3.7 m) to allow the passage of vehicles and tractors, to 40 feet (12 m) on farm land to pass combines and swathers.

Gates for cattle tend to have 4 wires when along a three wire fence, as cattle tend to put more stress on gates, particularly on corner gates. The fence on each side of the gated ends with two corner posts braced or unbraced depending on the size of the post. Most gates can be opened by push post. The chain is then wrapped around the tractor post and pulled onto the nail, stronger people can pull the gate tighter but anyone can jar off the

chain to open the gate.

Installation of barbed wire

The most important and most time-consuming part of a barbed wire fence is constructing the corner post and the bracing assembly. A barbed wire fence is under tremendous tension, often up to half a ton, and so the corner post's sole function is to resist the tension of the fence spans connected to it. The bracing keeps the corner post vertical and prevents slack from developing in the fence.

Brace posts are placed in-line about 8 feet (2.4 m) from the corner post. A horizontal compression brace connects the top of the two posts, and a diagonal wire connects the top of the brace post to the bottom of the corner post. This diagonal wire prevents the brace post from leaning, which in turn allows the horizontal brace to prevent the corner post from leaning into the brace post. A second set of brace posts (forming a double brace) is used whenever the barbed wire span exceeds 200 feet (60 m). If an 8" post is * feet in length is driven four feet into the ground the brace post assembly can be omitted.

When the barbed wire span exceeds 650 ft (200 m), a braced line assembly is added in-line. This has the function of a corner post and brace assembly but handles tension from opposite sides. It uses diagonal brace wire that connects the tops to the bottoms of all adjacent posts.

Line posts are installed along the span of the fence at intervals of 8 to 50 ft (2.5 m to 15 m). An interval of 16 ft (5 m) is most common. Heavy livestock and crowded pasture demands the smaller spacing. The sole function of a line post is not to take up slack but to keep the barbed wire strands spaced equally and off the ground.

Once these posts and bracing have been erected, the wire is wrapped around one corner post, held with a hitch (a timber hitch works well for this) often using a staple to hold the height and then reeled out along the span of the fence replacing the role every 400 m . It is then wrapped around the opposite corner post, pulled tightly with wire stretchers, and sometimes nailed with more fence staples, although this may make readjustment of tension or replacement of the wire more difficult. Then it is attached to all of the line posts with fencing staples driven in partially to allow stretching of the wire.

It is installed from the top down. Barbed wire for agriculture use is typically double-strand 12½-gauge, zinc-coated (galvanized) steel and comes in rolls of about 50kgs.