



Construction Specification 050T Temporary Fence

Scope

This work shall consist of furnishing and installing temporary fence and related essential components.

Management of grazing livestock requires confinement and rotation of animals to certain areas of a farm. Temporary fences typically function within the confines of a permanent perimeter fence to encourage or discourage behavior in an area. As such, temporary fencing is much less costly than permanent high tensile wire or other permanent fences and is easier to deploy/remove. Temporary fencing generally includes woven braided wire, polyethylene with wire strands woven into it (polywire, polyrope or polytape), or aluminum wire. Other forms include products labeled "Electro/Electric Fence/Netting" which are similar in appearance to Standard Woven Wire (Construction Specification 050WW Fence). High tensile wire or standard WW can be used as temporary fencing but is generally unwieldy and difficult to roll and unroll.

Temporary electric fence is constructed with the intent of being left in place for a short, known term (hours to days) of animal exclusion or for rotational grazing. Temporary fence is never constructed in place of a permanent fence. Therefore, criteria for electric fencing requires materials, design, and construction that will accomplish the intended purpose and last for the time period planned with no more maintenance than necessary. The interim and end management objectives of the producer will determine the type and construction of fencing. For example, in Vermont dairy systems and many beef operations, one strand of temporary wire is all that is required if livestock are conditioned to its use. For small ruminants, swine, and poultry operations, electric netting is highly recommended for protection against predation, improved livestock control, and ease of use. In practice, temporary fences may be attached to permanent fences to further sub-divide pastures, exclude livestock from seasonal wet areas or wildlife habitat, or on cattle walkways, access roads or around a farmstead to facilitate seasonal operations.

Energizing

Energized fences last longer than non-energized fencing and require less maintenance. Electric fences are a pain barrier (electrical shock), not a physical barrier. Do not use underpowered energizers. Voltage on these fences (150 ft) should be 3000 to 6000 volts (0.25 to 6 joules of output) at the end of the fence line depending on the fence type, fence length, and livestock type. Solar power or household regular 110v power outlet can be used to energize the fence. Follow the manufacturer recommendations for installation, including specific energy and equipment requirements. Do not use a continuous current fence charger with any electric fence whether netting, polywire, polyrope, polytape or metal wire from any brand or source. Use only intermittent pulse energizers to minimize fire risk. When deployed, the fence should be energized at all times so animals will not escape or accidentally become entangled as well as to maintain fence compliance training.

Wire/Net

Temporary energized fencing will consist of one to five strands of wire or an Electric Net. The type and number of wires required depends on the species and size of livestock to be managed (See Table 1 below). Additional wires may be used as a ground or a Pos/Neg Electric Net, if needed. Insulators and other attachments to posts must be installed as needed and in conformance with the manufacturer's recommendations. U.V. stabilized polywire, polyrope or polytape or aluminum-type wire may be substituted for standard metal high tensile wire. Use electric fence warning signs for public safety as needed.

Posts

Posts may consist of fiberglass, metal, hardened plastic, wood plastic composite, red and white cedar, tamarack, locust, or pressure treated wood, or a combination of posts and battens. Using existing trees as posts is not recommended. Spacing depends on terrain and use but should be 50 feet or less. Corners and/or turns may need additional supporting posts to keep the fence upright. Consult the manufacture recommendations and guidelines for specific spacing or supporting post requirements.

Ground

All energized fences must be grounded. Temporary fence may be attached to other permanent fence without its own grounding system as long as the permanent fence is properly grounded. All grounding devices will meet the same criteria as stated for grounds under Permanent High Tensile – Energized Fence in the NRCS Fence Standard.

Livestock Training

Training livestock is fundamental to an efficient grazing system. Introduce livestock by installing an electric fence inside a permanent fence so that they cannot escape when startled by an electric shock. Fencing should consider the behavior of the livestock to be enclosed. The most common instance of temporary fencing (for mature grazing cattle) consists of one wire at a height of no less than 26 inches from the ground. Polytape should be used for horses instead of polywire due to their lower visual acuity. When using electric netting for smaller livestock, the netting should be no less than 30 inches in height.

TABLE 1: Energized Temporary Wire Fencing: Number of wires, livestock type, fence height, wire spacing. Number of wires and intended purpose of fence by livestock species will determine the number of wires [^]			
# of Wires	Livestock Type	Fence Configuration	
		Fence Height (Inches)	Spacing from Ground (Inches)
1	Mature Dairy or Beef Cattle	26 to 32	26 to 32
2	Yearling Cattle	24 to 36	18 to 24, 24 to 36
	Young Cattle, Mature Sheep and Mature Goats	20 to 30	8 to 10, 20 to 30
	Mature Horses*	46 to 50	22 to 28, 46 to 50
3	Cattle w/calves	34 to 44	11 to 18, 23 to 30, 34 to 44
	Young Sheep, Young Goats**	32	7 to 10, 15 to 20, 27 to 32
	Young Cattle, or Young Horses*	46	20, 34, 46
4	Calves**	40	8, 18, 28, 40
	Lambs or Kids**	30 to 38	6 to 16, 12 to 22, 18 to 30, 30 to 38
5	"Hard to control" Cattle, Horses, Sheep, or Goats	50	10, 20, 30, 40, 50
[^] It is not recommended to use temporary fencing for bison, captive deer or other non-typical livestock species.			
*Polytape recommended over polywire.			
** For calves, small ruminants (all ages), swine and poultry use electric netting for more control and for protection against predation.			

7. Specific Site Requirements