Espalier Your Fruit Trees

Training fruit trees in a flat form is known as espalier (es-PAL-yay). Espalier training can create an art form for your garden and give you productive fruit trees in a small space. The shape you train your trees to can take many forms. Some forms are very formal, but even the trellis systems used in commercial orchards could be considered a form of espalier.



Espalier at UBC Botanical Gardens

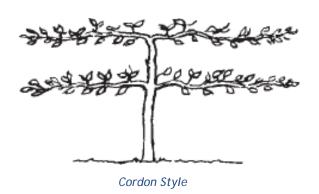
Apples and pears on dwarfing rootstocks are the easiest fruit trees to espalier. They produce long lived fruit spurs, reducing the amount of renewal pruning and retraining necessary. Figs, plums, apricots, and cherries can also be trained to more informal fan espaliers. Peaches and nectarines are unsuitable for espalier as they only fruit on one year old wood, requiring extensive annual pruning.

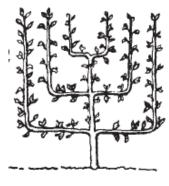
The first step is to choose your espalier style. One of the more popular styles locally is the Belgian Fence. This style is very suitable for apples and pears dwarf rootstocks. The trees can be planted 4' apart.



Belgian Fence Style

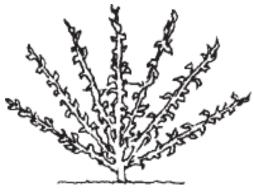
Two other styles suited to apples and pears are the cordon style, and the candelabra style. These styles can be used for dwarf or semi dwarf trees. M-27, G-41, or OHF-87 work best.





Candelabra Style





Fan Style

There are many suitable styles; the limit may only be your imagination. Whatever style you choose, make sure the site will get at least 6-8 hours of direct sun during the day. Southern and western exposures are best if against a fence or wall.

Before planting, you should build your espalier frame or trellis system. Freestanding espalier or trellis systems should ideally run North-South. You will need a sturdy support system. Wires between posts will work; many people attach a pattern of bamboo or cedar furring strips to the wires to aid the training. If training against a wall or solid fence, a trellis system should be built 10"-12" away from the wall to allow air

circulation around the tree.

When planting trees for espalier, it is best to start with young, unbranched whips, or branched trees with branches starting at 15"-18" above planting depth. Unbranched whips should be pruned 4" below the bottom wire. If the tree has suitable branches, you can begin tying them to your pattern frame. Use a stretchy material such as Stretch-Tie, rags, or horticultural tape to tie the branches.

After the first growing season, when you've gotten about 10" to 12" of growth on a branch, begin pruning certain branches while allowing others to grow, depending on your design. Tie the branches to your pattern frame or wires. As the tree continues to grow, your primary job is to prune unwanted branches as often as necessary to help develop the basic structure. You'll get used to repeating pruning steps each season and cutting off unwanted lateral branches that will try to grow in a way that does not mesh with your intended design. Every week or so, grab your pruning shears and head for your espaliered tree.

For best results, make sure your young trees have adequate water in the summer dry season. Use a good fruit tree fertilizer, but be careful not to overfertilize. Apply lime in the fall to keep the soil pH neutral and to supply calcium. Watch for pest problems and treat them as needed.



For an especially good espalier/fruiting wall method for sweet cherries, see our information on UFO Cherry Systems.

For more information about espalier training, one good resource in the <u>AHS Pruning and Training</u>, Christopher Brickell. Also worth the trip is the food garden at the University of British Columbia's Botanical Garden in Vancouver, B.C. where there are many good mature examples of espalier trained fruit trees.

