Espalier Shrubs and Trees

Technically speaking, an espalier (ess-PAL-yer) is a plant that has been trained to grow in only one plane. It has only two dimensions, height and width. It does not have the third dimension of depth that gives form to our shrubbery and trees. It is a two dimensional plant—a silhouette of a normal plant. It has been used in parts of Europe for centuries to grow fruit trees where land was scarce. With the development of dwarf fruit trees and their increased productivity for their size, few fruit trees are grown as an espalier today.

The main asset of an espalier plant in the landscape is that it provides large accent plants where space is minimal. The tracery effect of the limbs against a wall lets espalier plants add great accent in the landscape. As such, they should be used where accent is needed—at an entrance or focal area within the landscape. They are ideal choices for situations that require a tall plant but provide little space for diameter development.

Espalier plants should not be overused in the landscape. A small house would seldom use more than one. A large house would normally not require more than two.

Study the lines of your house and make note of any expanse of blank walls or fences. Choose a good location that will provide a good simple background for the espalier. Keep in mind that the larger and taller the espalier, the more pruning and training it will require. A well-managed espalier is a dramatic landscape accent, but a poorly-managed one is a landscape flaw.

Select a Design

The major effect of the espalier plant is in the tracery of the branches contrasted against a wall or fence. For this reason, you must think about the design to enhance the landscape.

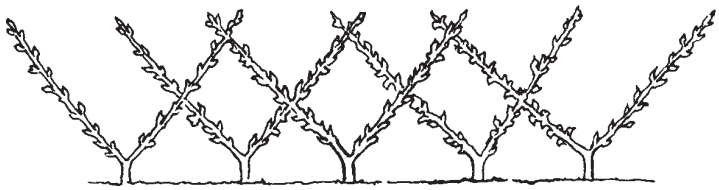
There are many designs. Some of the more common ones are candelabra, chevron, tiered, cordon, basket weave, pinnate, and palmate or fan-shaped (see the illustrations). The candelabra may be well suited for an espalier around a window. The cordon or basket weave may work well for fences.

Many designs may be difficult to create without a guide. You may wish to have a trellis or frame built in the shape of your design to help you place the limbs as you begin to train your plant. A trellis also provides support and gives you the espalier effect where the outside of a building is inappropriate, as with asbestos or aluminum siding.

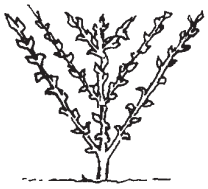
Desirable Characteristics

Age. Plants used for espalier should be young and supple. The limbs of these plants bend easily without breaking. Stiffly-grown young trees, unless they meet the design requirements, may need to be pruned to the ground and started all over again.

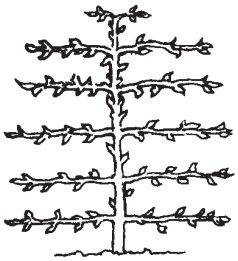
Flexibility. A shrub or tree that produces long, flexible branches is well suited for training as an espalier. Some of these are pyracantha, camellia, magnolia, and many of the fruit trees. Avoid plants with stiff branches such as dwarf yaupon or rotunda holly.



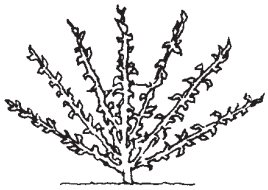
Basket Weave



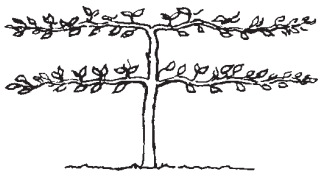
Chevron



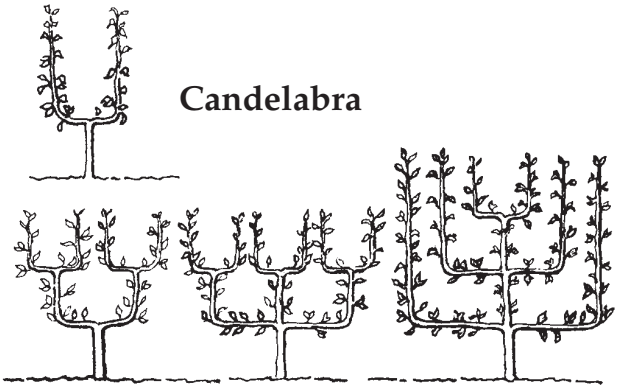
Tiered



Palmate



Cordon



Candelabra

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Height. Consider the mature height of a plant when selecting one for a particular location. Tall-growing plants such as magnolia are not suited for most one- and many two-story homes. Select a plant whose mature height closely matches the height of the area where it is to be espaliered.

Plant Your Espalier Plant

Follow normal planting practices. Make sure the soil reaction (pH) is suitable for the plant you are planting. Plants such as the camellias require acid soils.

Dig a hole at least twice as wide as the root ball of the plant. Make it about 6 inches deeper than the root ball. Make the hole as close to the wall or fence as possible. Back-fill the hole and set the plant into place. It is important that the final height of the root ball be the same as the surrounding soil.

Set the plant so the main trunk or limbs are about 6 inches from the wall. This will let air circulate, which is essential for good growth and sanitation. Fill the hole about two-thirds full with soil and then water thoroughly. Continue filling the hole. Use the remaining soil to form a saucer about the plant to aid in watering for the first year. Remember to mulch your espalier to reduce water stress and weed competition. Mulch also protects roots from heat in summer and cold in winter.

Train Your Espalier Plant

Bending the twigs and branches to meet your espalier design may be difficult, and you should do it when branches are tender. If the branches might break, you may have to wire each branch and gradually move it into place.

Spread the branches on your frame or trellis and attach them securely. Remove unwanted limbs, using a proper pruning cut made with a sharp, clean pruning tool.

Tie and fasten the limbs into place, using soft string, raffia, or bands of grafting rubber. You can also use strips cut from old inner tubes.

Make the tie loosely (if possible) so there is a small loop for the stem to grow. Wire is a poor choice of material to attach limbs during this training process because it may easily bind or girdle a limb. Even string tied tightly can constrict growth. Examine your ties frequently, and adjust the tension if you notice binding.

If you do not use a trellis or frame, position the limbs, and drive a nail at the desired position. Tie the branches to the nail, using materials as for a trellis. If the wall is brick or masonry, use masonry nails instead of conventional ones. Also available for attaching espalier limbs are vine supports. These are small metal disks with a wire loop. You glue the disk to the wall or fence where you want a limb. Once the glue has set, you move the limb into place, and the wire loop holds it there. These wall supports are available from garden centers and plant supply stores.

The distance between the limbs of your espalier varies with your chosen design and plant. Since the tracery of the limbs is the beauty of an espalier, space the limbs far enough apart to enhance this effect. Sixteen inches is considered to be the minimum distance between limbs. This distance permits full foliage on most limbs without losing the tracery effect.

Maintain Your Espalier Plant

Espalier shrubs and trees are not supposed to be trained once and forgotten. In addition to the normal maintenance chores of fertilizing, watering, and controlling insects and diseases, you need to train and prune espalier shrubs several times a year. Every few months as your plant grows, continue to bend and tie limbs to your trellis or wall as they grow. Remove unwanted sprouts. This additional training and pruning make espalier plants high-maintenance in the landscape.

Plants Suitable for Espalier

While it would be impossible to list all plants suitable for use as an espalier plant, here are some suitable ones:

Scientific Name	Common Name	Height in Feet
Abelia grandiflora	Abelia	6
Acer palmatum	Japanese Maple	10-20
Camellia japonica	Common Camellia	10-20
Camellia sasanqua	Sansanqua Camellia	10-20
Cotoneaster spp.	Cotoneaster	6-18
Euonymus alata	Winged Euonymus	9
Ficus carica	Common Fig	12-25
Forsythia spp.	Forsythia	3-9
Ilex cornuta "Burfordii"	Burford's Holly	9-15
Ilex opaca	American Holly	25-30
Ilex opaca hybrids	Hybrid American Holly	25-30
Magnolia soulangiana	Japanese Magnolia	25
Michelia figo	Banana Shrub	15-20
Malus spp.	Flowering and fruiting apples	15-25
Osmanthus fragrans	Sweet Olive	15-25
Photinia spp.	Red Tip Photinia	15
Poncirus trifoliata	Trifoliate Orange	15-30
Prunus persica	Peach	20
Pyracantha spp.	Pyracantha or Fire Thorn	6-18
Pyrus spp.	Flowering and fruiting pears	25-45

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Revised by **Dr. Mengmeng Gu**, assistant Extension professor, Plant and Soil Sciences. From an earlier revision **Dr. David Tatum,** Extension professor, Plant and Soil Sciences.

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