Almost all greenhouses are variations of two basic designs: the even-span and the lean-to. The lean-to looks like a full greenhouse that has been sliced down the middle and attached to an existing structure. The even-span is a complete enclosure capable of functioning independently of other buildings. Beginners often find the lean-to ideal, because it can be incorporated into the living space. As a rule, it is easier to heat and supply with electricity; systems already in the home can be tapped. Because your home is the other half of your greenhouse, the lean-to is generally less expensive to construct than an even-span.

The even-span, although designed to be a self-contained unit, also can be treated as a modular unit and attached to a house or slipped between kitchen and garage. The even-span is more expensive than a lean-to, but it offers more growing room.

A greenhouse is basically a translucent bubble engineered to admit the sun but keep out the cold. This means it can be made of a wide variety of materials--from aluminum and glass to a wood frame covered with a thin plastic film. Aluminum and glass structures are most popular because of their strength and durability. Plastic structures are not so attractive and must be re-covered every year or two. But their lower price and simple construction make them a tempting alternative.

Both the even-span and the lean-to are available in glass-to-wall or glass-to-ground models. Whether the glass extends to ground level or joins a short wall depends on the severity of winters in your area. All glass structures, however, require a solid footing extending below the soil's frost line. But a wall of stone, brick, or wood about two or three feet high increases the ability of the greenhouse to retain heat. Growers in more temperate regions often opt for the glass-to-ground type because of the additional growing area beneath the plant benches.