United States Department of Agriculture

Conservation Practice Standard Overview

High Tunnel System (325)

A High tunnel system is an enclosed polyethylene, polycarbonate, plastic, or fabric covered structure that is used to cover and protect crops from sun, wind, excessive rainfall, or cold, to extend the growing season in an environmentally safe manner.

Practice Information

This practice applies to land capable of producing crops. This practice applies where sun or wind intensity may damage crops, or where an extension of the growing season is needed due to climatic conditions. The practice does not apply to crops not grown in the natural soil profile. Raised beds are limited to 12 inches in depth.

The high tunnel structure must be planned, designed, and constructed from a manufactured kit in accordance with manufacturers' recommendations. The high tunnel frame must be constructed of metal, wood, or durable plastic; and be at least 6 feet in height at the peak of the structure. The high tunnel covering material shall have a 4-year-minimum lifespan. For polyethylene covers, a minimum 6-mil greenhouse grade, UV-resistant material should be used.

This practice has a minimum expected life of 5 years. Operation requirements for the facility depend on the type of facility chosen by the producer and will include provisions for proper disposal of residual material. Routine maintenance is needed to ensure that the facility operates as designed.

Common Associated Practices

Critical Area Planting (342); Mulching (484); Roof Runoff Structure (558); and Underground Outlet (620).

For further information, contact your local NRCS field office.