

325 – High Tunnel System Implementation Requirements

Producer:

Project or Contract:

Location:

County:

Farm Name:

Tract Number:

Practice Lifespan – 5 years



Practice Purpose(s): (check all that apply)

Improve plant health and vigor

Other: (Specify)

Other: (Specify)

Description of Work:

If you have questions about this planned **High Tunnel System** practice contact:

Name:	<input type="text"/>	Telephone:	<input type="text"/>
Email:	<input type="text"/>		

Definition

A high tunnel is an enclosed polyethylene, polycarbonate, plastic, or fabric covered gothic styled 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. Crops are grown within the high tunnel in the natural soil profile.

Note: electrical, heating and mechanical ventilation systems can be added at the participant's own expense.

For NRCS Use Only

Designed By:

Date

Checked By:

Date

Approved By:

Date

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High Tunnel Structure	
Total Identified Resource Concern Extent:	
Planned Extent (Square Feet):	
Length (ft):	Number of High Tunnels:
Width (ft):	Total square feet:

Selection

Choose models based on the required criteria listed on the following page. The model chosen must **meet all of the following criteria**. A high tunnel is a versatile structure that can be modified in different ways and often there is no standard “kit”.

High Tunnel Required Criteria:

- Frame must be gothic style (peaked, not round).
- The high tunnel must be installed according to manufacturer’s specifications.
- 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 frame must be covered with at least 6-mil, 4-year UV resistant polyethylene film (the tunnel must be covered in order to be certified for payment).
- End walls shall be installed and framed with wood lumber or metal and covered with UV resistant polyethylene film (at least 6-mil, 4-year), polycarbonate, or plywood.
- At least one end wall must contain a door for access.
- Plan supportive conservation practices to address all environmental concerns associated with the installation and use of the high tunnel systems such as erosion, irrigation, and runoff.
- Locate structures to avoid buried public utilities.
- Locate the structure near a viable water source for irrigation.
- Raised beds may be installed to improve soil condition, fertility, and access. Raised beds shall be a maximum of 12 inches in depth.

Note: For organic producers, it will be the responsibility of the producer to make sure that all permissible activities, design, material used, and material specifications are consistent with the USDA Agricultural Marketing Service National Organic Program, National Standards on Organic Agricultural Production and Handling.

High Tunnel System Construction
Prepare site according to manufacturer’s instructions. Sites should be level, well-drained, and clear of large stones and other debris. Consider using a site level/transit.
Allow enough space along sides of structure for snow removal equipment to operate, as snow must be removed .
Assemble high tunnel structure according to manufacturer’s instructions.
Seed down the disturbed area around the exterior of the tunnel with perennial sod. Use straw or hay mulch to stabilize the soil and improve seed germination. (Follow requirements of Conservation Practice Standard 342 Critical Area stabilization).

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High tunnels shed a large amount of water and can create drainage and ponding issues where none previously existed. Direct runoff away from the high tunnel structure to avoid ponding. Provide a detention basin, storage reservoir, or stable outlet when runoff from tunnel covers empties onto the ground surface with potential to cause erosion.

Operation and Maintenance

- Follow manufacturer's instructions for operation and maintenance of the high tunnel structure.
- Periodically inspect structure and cover for damage. **Reinstall or repair plastic promptly.** Most vendors sell repair tape specifically for patching rips and holes. Clean existing plastic with soap and warm water prior to applying repair tape. Use tape by itself for small holes or tears. For larger holes or rips, cut square sections of polyethylene at least 3" larger than the hole. Tape plastic patch to the existing plastic on **both** the interior and exterior of the tunnel.
- Completely close up high tunnel during high wind events.
- Inspect runoff control measures after every significant rainfall event. Repair promptly.
- **Remove snow on and around the structure. During periods of heavy snow accumulation, remove snow promptly so the snow does not collapse the structure. Plastic may need to be slashed to save the structure from heavy snow load.**

Other: _____

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Practice Implementation: Certifying official completes 'Check Out information'

Recommendation: Attach digital photograph(s) to document practice installation and illustrate practice before and after effects.

CHECK OUT INFORMATION:

Amount Completed: Number: _____ Square feet _____

* Obtain a copy of the manufacturer kit information. File in customer folder.

Remarks _____

Check out by: _____

Date: _____

As-built measurements:

Length (ft)

Model

Width (ft)

Manufacturer

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