

High Tunnel System

High Tunnel Selection Criteria

RI - 325

High Tunnel Selection Criteria: Models must meet all criteria listed below:

Frame is gothic style (peaked versus round)

Structure is at least 6 feet in height

Tunnel width does not exceed 30 ft.

Bows and ground posts are 14 gauge galvanized steel or stronger
(exception: 16 gauge, 2" square galvanized steel bows are permitted)

Bows are spaced 4 ft. apart. (exception: oval bows may be spaced 6 ft apart).

3 purlins for tunnels < 26 ft. wide, 5 purlins for tunnels ≥ 26 ft. wide

Frame is enclosed polyethylene, polycarbonate, plastic, or fabric covered structure that is used to cover and protect crops

Roll-up or drop-down sides are installed on both sides

End walls are framed with wood lumber (2x4 or 2x6) or metal and covered with > 6-mil UV resistant polyethylene film or with polycarbonate, wood or other.

At least one end wall contains a door for access

High Tunnel Selection Considerations:

- Consider a minimum 6 ft. x 6 ft. opening on each endwall for increased ventilation and access (e.g. 2- 36 inch wide doors on each end or larger roll-up, sliding, or hinged doors)
- Consider the size of the equipment to be used in the tunnel when constructing the endwalls
- Consider using a truss at least every other bow. For tunnels ≥ 26 ft. wide consider using trusses with braces/cross-ties on every bow
- Consider adding more purlins and/or wind bracing kits in windier areas
- Consider the height of the sidewall as it relates to the height of the target crops (and personnel who will be working in the tunnel)