

Seasonal High Tunnel System for Crops

Approved Product List & Selection Criteria **NH-798**

Subject to update – product lists with later dates will supersede this list. This information is provided as a public service and constitutes no endorsement by the United States Department of Agriculture or the Natural Resources Conservation Service of any service, supply, or equipment listed. While an effort has been made to provide a complete and accurate listing of services, supplies, and equipment, omissions or other errors may occur and, therefore, other available sources of information should be consulted.

Source	Model
Atlas Manufacturing, Inc. Alapaha, GA (800-346-9902) www.atlasgreenhouse.com	Snow Arch Budget Plus 2" Square Structure
Growers Supply South Windsor, CT (800-476-9715) www.growerssupply.com	ClearSpan Gro-Max Gothic with wood or metal framed endwalls
Griffin Greenhouse & Nursery Supplies Tewksbury, MA (978-851-4346) www.griffins.com	New England Windjammer Series 5000
Ledgewood Farms Moultonborough, NH (603-476-8829) www.ledgewoodfarm.com	Ledgewood Farm Gothic
Rimol Greenhouse Systems, Inc. Hooksett, NH (603-494-9426) www.rimol.com	Nor'Easter Northpoint Eastpoint Rolling Thunder
Harnois Industries St. Thomas, Quebec (888-427-6647) www.harnois.com	Ovaltech I Ovaltech III
Four Season Tools Kansas City, MO (816-444-7330) www.SmallFarmTools.com	Four Season Moveable Gothic
W.H. Milikowski, Inc. Stafford Springs, CT (800-243-7170) www.whmilikowski.com	Northern Star Series

Models above must also meet all the criteria on the following page. Models that are not listed above may also be allowed, providing they meet all the criteria on the following page.

High Tunnel Selection Criteria:

- Frame is gothic style (peaked versus round)
- Tunnel width does not exceed 30 ft
- Bows and ground posts are at least:
 - (i) 1.90" round 14 gauge galvanized steel or stronger for tunnels \geq 26 ft. wide
 - (ii) 1.66" round 14 gauge galvanized steel or stronger for tunnels $<$ 26 ft. wide
 - (iii) 2.00" square 16 gauge galvanized for all tunnel widths
 - (iv) 1.625" x 2.750" oval 16 gauge for all tunnel widths
- Bows are spaced 4 ft. apart. Bows may be spaced 6 ft. apart only for tunnels constructed with galvanized steel bows and ground posts that are at least (i) 2.375" round 14 gauge or (ii) 2.0" x 3.56" oval 16 gauge
- 3 purlins for tunnels $<$ 26 ft. wide, 5 purlins for tunnels \geq 26 ft. wide
- Trusses with braces/cross-ties every other bow for tunnels \geq 26 ft. wide
- Wind bracing between last and next to last bow on each end
- Frame is covered with at least 6-mil, 4-year UV resistant polyethylene film
- Roll-up or drop-down sides are installed on both sides and rope (or equivalent material) is attached from hip-board to baseboard to protect sides from billowing
- End walls are 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 contains a door for access

High Tunnel Selection Considerations

- Construct 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).
- Evaluate the size of the equipment to be used in the tunnel when constructing the endwalls and the height of the sidewall as it relates to the height of the target crops (and personnel who will be working in the tunnel).
- Use a truss at least every other bow. For tunnels \geq 26 ft. wide consider using trusses with braces/cross-ties on every bow.
- Add more purlins and/or wind bracing kits in windier areas.
- Avoid plywood on southern sides of the tunnel. Paint plywood white to increase light reflectance.