

Building a High Tunnel

Getting Started

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Horticulture Professor
Utah State University Extension
Cache County

NRCS High Tunnel Video

<https://youtu.be/ZJb8hA4X5Pk>

USDA Natural Resources Conservation Service
United States Department of Agriculture

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High Tunnel System Initiative



High Tunnel System Initiative

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NRCS High Tunnel Program

- USDA Grant program
 - **October, 1 2023** deadline for 2024 season
- Environmental Quality Incentive Program
 - To assist beginning farmers
 - Easy application process
- Reimbursed funds
 - Price per square foot (\$4.²⁹ per ft²)
 - Must be a purchased kit
 - Gothic arch for snow areas

U.S. Department of Agriculture
Natural Resources Conservation Service

NRCS-CPA-1200
October 2021

CONSERVATION PROGRAM APPLICATION

Clear Form

Applicant (Decision Maker):	Application Date:
Address:	Location where assistance is requested:
Email:	
Telephone:	Receive text messages (optional):
Assistance Requested:	

Click here for [instructions](#) to complete this form or contact the local office for assistance.

1. Do you have a customer record with the Farm Service Agency (FSA)?

Yes No

2. Interested in participating in the following (select all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Agricultural Conservation Easement Program-Wetland Reserve Easement (ACEP-WRE) | <input type="checkbox"/> Environmental Quality Incentives Program (EQIP) |
| <input type="checkbox"/> Agricultural Management Assistance (AMA) | <input type="checkbox"/> Regional Conservation Partnership Program (RCPP) |
| <input type="checkbox"/> Conservation Stewardship Program (CSP) | |

a) Program enrollment type, activity type, and/or project name, as applicable:

3. Applicant Information:

Select the business structure and enter the legal name, and tax identification number for all applicants who will be participants on the contract or agreement including the decision maker.

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NRCS High Tunnel Program

- Decide crop to be grown
 - vegetables, fruit, cut flowers...
- Decide size of hoop house...
 - 14-30' wide x 50-150' long
- Do your homework...
- Consider shipping costs...
 - Rimol (New Hampshire)
 - Zimmerman (Missouri)
 - Farmtek (Iowa)
 - Growers Supply (Iowa)
 - Roberts Ranch (Utah)



Roberts Ranch Hoophouses
 334 E Southfield Rd
 Spanish Fork, UT 84660 US
 (801) 210-9395
 info@rrhoophouses.com
 www.rrhoophouses.com

Estimate

ADDRESS
 JayDee Gunnell
 Utah 84339

SHIP TO
 JayDee Gunnell
 Utah 84339

ESTIMATE # 1400
DATE 04/08/2021
EXPIRATION DATE 05/08/2021

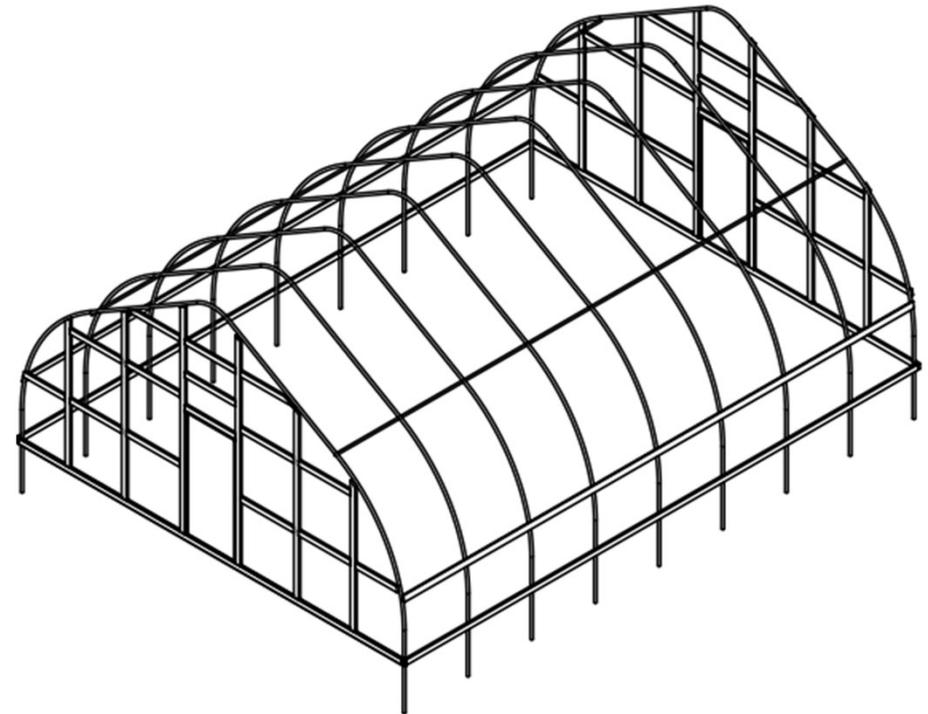
DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Hightunnel - Kit (Gothic)	Size: (24x48) Includes: Our high strength galvanized steel pipe construction, 6 mil UV protected polyfilm, channel and spring lock attachment, roll up sides, repair tape, instructions, and engineered plans.	1	5,424.00	5,424.00
	Convenience Fee	3.5% of Balance	1	217.28	217.28
	Doors - Dual Sliding	Barn style sliding double doors. Includes 4 trolleys, 14' round track, 14 wall bracket wood mounts, 2 stay roll offsets, and 2 caps for round track.	1	450.00	450.00
	Interior Bracing	Interior bracing for gothic style Hightunnel	11	21.00	231.00
				TOTAL	\$6,322.28

We will schedule the job after receiving the non-refundable \$500.00 deposit.

Kit Materials List

- Everything for the general structure:

- 4' galvanized post
- Purlin pieces
- U-channel
- Wiggle wire
- Greenhouse Plastic (6mil)
- Fabric clips
- Roll-up mechanism
- Screws (#14 Tek)







Tools Materials List



- Level
- Measuring tape
- Sharpie
- Hammer
- Drill
- Reciprocating saw
- Duct tape
- Pressure treated lumber
- Pine / cedar / redwood
- Sakrete / Quikrete



Measure and Drill the Holes





Build Base Frame / Set 4' Posts

Assemble / Install Ribs and Purlins





Hose Clamps vs Purlin Brackets



Install Hip Boards - Wiggle Wire Channel



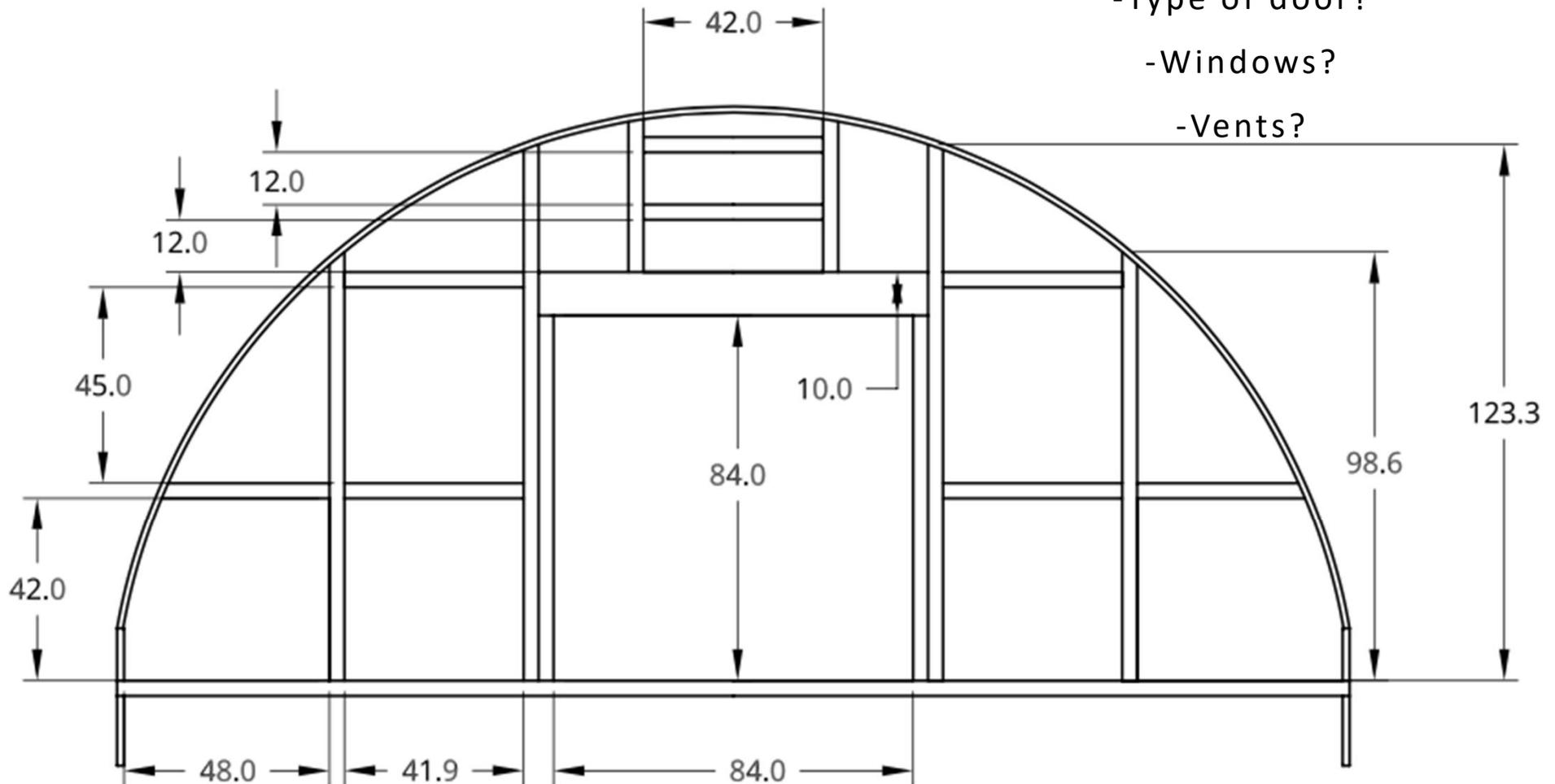
Build the End Walls

QUESTIONS TO ASK

-Type of door?

-Windows?

-Vents?





Install greenhouse plastic

Stretch end walls first...



Many hands make light work...

Tennis balls...





YouTube will be your best friend...

▶ ⏪ 🔊 0:12 / 0:30

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Attaching Greenhouse Plastic Wiggle Wire

33,833 views • Mar 8, 2017

👍 84 🗑 DISLIKE ➦ SHARE ⌵ SAVE ...



Bootstrap Farmer
11.6K subscribers

SUBSCRIBE



Roll Up Curtains and Hand Cranks

EZ Snap Hooks Anti-Billow
Hardware - Pack of 25
\$31.00







Furring Strips on the Exterior



North Logan Field Office

**1860 North 100 East
North Logan, UT 84341
(435) 557-5135**

Brandon Todd, District Conservationist, 435-557-5121
Camille David, Program Assistant, 435-557-5120
Justin Elsner, Soil Conservationist, 435-557-5128
Ray Howard, Civil Engineer, 435-557-5127
Keila Ortiz, Soil Conservationist, 435-557-5124
Kaden Potter, Soil Conservationist, 435-557-5122
Mathew Tanner, Civil Engineer, 435-557-5130
Ethan Blossch, Rangeland Management Specialist, 435-557-5123
Jace Farnsworth, USAF RC, 435-557-5113
Kyle Brown, UDAF Conservation Planner, 435-557-5122

Ogden Area Office

**2871 South Commerce Way
Ogden, UT 84401
(801) 629-0580**

Ammon Boswell, ASTC - Field Operations, 385-405-7247
Brent Draper, Area Civil Engineer, 385-405-7250
Jonathan Bingham, Field Civil/Ag Engineer
Andrew Hopkins, Area Resource Coordinator, 385-405-7248
Sara Saunders, Field RCPP Program Manager, 385-405-7261
Shelly Szeghi, Cultural Resource Specialist, 385-405-7244
Jim Spencer, Area Biologist, 435-722-4621 x128 (Roosevelt)

<https://www.nrcs.usda.gov>

Search for "high tunnel"
Local Service Centers Directory
Find your state
Find your local county

Justin.Elsner@usda.gov

(435) 557-5128

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Strawberry Research 2022



General Production

Varietal Selection

Seed Storage & Handling

Transplant Production

Mulches & Row Covers

High Tunnels

Pollination

Postharvest Handling

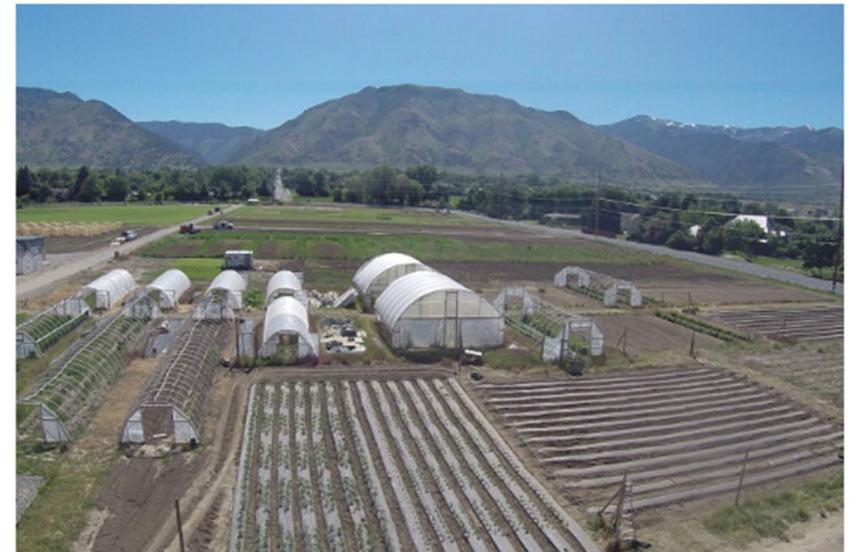
Organic Production

High Tunnels

High tunnels are structures used to improve the growing conditions during early spring and late fall. They significantly increase earliness, total yield potential, and crop quality.

High tunnels come in a variety of widths (14-30 feet) and lengths (50-150 feet) and are tall enough so that a person can stand up in part of the structure. Some tunnels are tall enough to accommodate tractors and other equipment. High tunnels are not greenhouses since most are not heated and rely on manual ventilation for temperature control

When considering growing in high tunnels, prior to construction, carefully select the site and location of the structure. Tunnels should be oriented with the ends toward the dominate wind direction. Space them so that they don't shade each other and with room for snow removal. Remove heavy, wet snow from the top of the tunnels. If left, melting snow will drip into the tunnel along the side walls. This cold water can slow plant growth and make it difficult to manage watering inside the tunnel. Finally, the distance between tunnels should allow for adequate (cross) ventilation.



Happy Growing...

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