

# STRUCTURES



## BRANDS CARRIED

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[agratech.com](http://agratech.com)



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[poly-tex.com](http://poly-tex.com)



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[totalenergygroup.com](http://totalenergygroup.com)



Agra Tech has had you (and your crop) covered for over 45 years. Specializing in quality commercial greenhouses and offering the broadest possible spectrum of model and function. They have greenhouses in all 50 United States and in many international locations. All of their greenhouses are designed to optimize your Natural Ventilation needs.

## Solar Light

The Solar Light is known as the “Dry House” due to its built-in condensate removal system, it is the obvious choice for your highest quality, most valuable crops, from your most critically sensitive environmental requirements to mass production areas and head houses. A greenhouse for all seasons, hard glazed with multi-wall or corrugated polycarbonate. The Solar Light provides the driest environment possible by use of its condensate control system built into top chords, purlins, and under gutter channel. Dry House, Solar Light, natural ventilation greenhouse.

### Features:

- Widths of 18', 24', 30', 36', 42', 48' and 50' available.
- Eave heights of 8', 10', 12', and 14'. Other heights may be available upon request.
- 6:12 Roof Pitch advantages: Aids in condensate removal. Air circulation is improved due to large air mass. Enhances natural roof ventilation systems. Gathers low winter sunlight. Sheds snow to increase snow loading. Ample room for energy curtain systems, lighting, heating, roof vents equipment and transportation systems.
- Strong 4" square sidewall columns with kneebraces to absorb the wind load.
- 4" square interior columns 12' on center for most sizes
- Ideal for natural ventilation.
- Single or Double Ridge Vents, optional
- 12' on center column and truss spacing admits more light, gives more freedom of movement.
- Designed for Corrugated Polycarbonate, or Multi-Wall (8mm Twin-wall or Triple Wall) Polycarbonate.



## Sawtooth

The Agra Tech Greenhouse Sawtooth is a low profile single slope truss. Heated air travels up the roof slope away from the plants. The vertical roof section can be outfitted with a rack and pinion vent or roll up wall.

With a vent or opening wall on the windward sidewall and vent on leeward roof, excellent ventilation is achieved.

### Features:

- Widths 30' & 32'. Other widths available upon request.
- Eave heights of 8', 10' and 12'. Other heights may be available upon request.
- 3:12 Roof Pitch
- Strong 4" square sidewall columns with kneebraces to absorb the wind load.
- 2 7/8" or 4" square interior columns 12' on center
- Ideal for natural ventilation.
- Vent or opening wall at peak, optional
- 12' on center column and truss spacing for most loads





## Insulator

The Insulator Greenhouse is a Gutter Connected structure to be covered with poly. Available in Code or Non-Code versions. This house provides quality, strength and ease of construction.

The Insulator Greenhouse performs well in all climates from Alaska to Mexico and beyond.

### Features:

- Gutter Connected Widths of 18', 21', 24', 27', 30', & 35'.
- All Galvanized Steel bolt-together frame.
- All Arches are 6' on-center. Six foot arch spacing is the optimum for poly roof to prevent rain and wind pockets.
- Heavy Duty Commercial grade Gutters of (10 and 12 gauge) at side and mid columns. The gutters are 11" wide and 6" deep.
- 3 runs of condensate purlins are standard on all Insulator houses to be covered with poly. Condensate gathering purlins are a strong "Z" design and protect plants from condensate drip.
- 4" square sidewall columns 12' on center are standard. 4"sq or 2 7/8" interior columns 12' on center are standard. Wide spans and heavy loads may use 6' on center interior columns.
- International Building Code of 12/100C is standard. Snow loads and wind exposures are also available on some widths. Call for availability.
- All these houses are available as a Non Code version, the Insulator-NC.



## Continental

Agra Tech's Continental Greenhouse is a Gothic Gutter Connect structure that can be covered with poly, 8mm Twinwalled Polycarbonate or Corrugated Polycarbonate. A ridge vent can be added to provide excellent natural ventilation whether the roof is covered with poly or polycarbonate. Extra large gutters add strength and carry 60% more runoff away from the greenhouse.

The Continental is recommended for all climates, from snow to sun.



## North Slope



The North Slope is designed to shed snow and allow maximum light into the greenhouse for Northern climates. We have found that its generous Gothic peak makes it easy to cool with natural ventilation so that it excels in mild to hot climates as well. The North Slope is a commercial grade quonset / high tunnel greenhouse. The North Slope's Gothic arch design with no flat spots is stronger and drips less.

## Thermolator



The Thermolator is one of our most popular quonset greenhouses, aka Tunnel. Growers have successfully built thousands of Thermolator greenhouses / tunnels since 1980. The Thermolator boasts the best value per square foot of all our greenhouses as it can be used for practically all crops in almost all weather conditions and climates.



## Rolling Bench



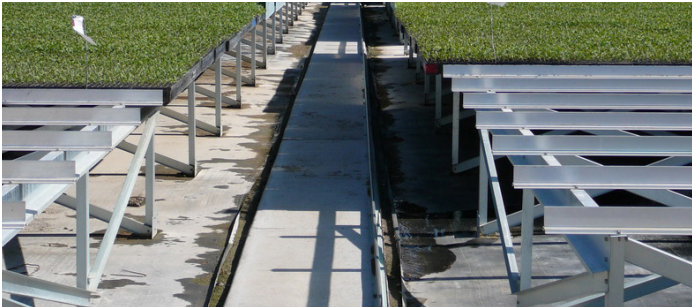
Simply put, Agra Tech Rolling Benches increase total utilization of your greenhouse space by reducing the number of aisles. Aisles that can't be used for growing are eliminated making that space available for production, adding significant square footage of growing area. Rolling benches work by installing a fixed base and using a set of rolling shafts, the bench top is rolled back and forth to open or close aisles as needed.

## Stationary Bench



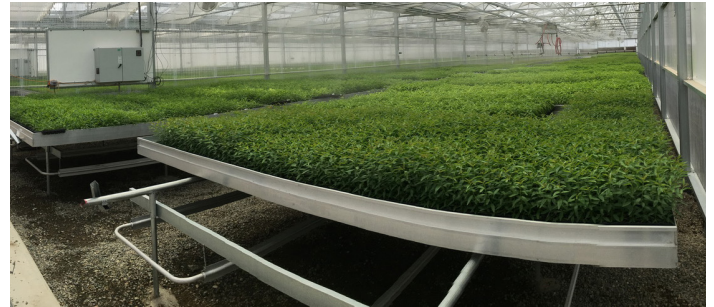
For crops that require constant attention and when all benches need to be accessed simultaneously, Stationary benches should be used. Designed with the same quality galvanized steel as the rolling benches. Durable and easy to install. Benches are constructed with galvanized steel 1 1/2" wide cross bars, 2" id. "U" shaped legs, and break formed point fastened runner's which run the length of the bench.

## T-Rail Bench



T-rail refers to an aluminum extrusion that is in the shape of an inverted T. They are designed for Styrofoam plug trays that are stiff enough to span between the extrusions. A base of steel bench legs and runners is required to support the trays. T-rail benches are fixed. The trays can be slid from the center aisle of a greenhouse to the sidewall or to one end for pickup and transfer. This system is used for intensive large scale transplant production.

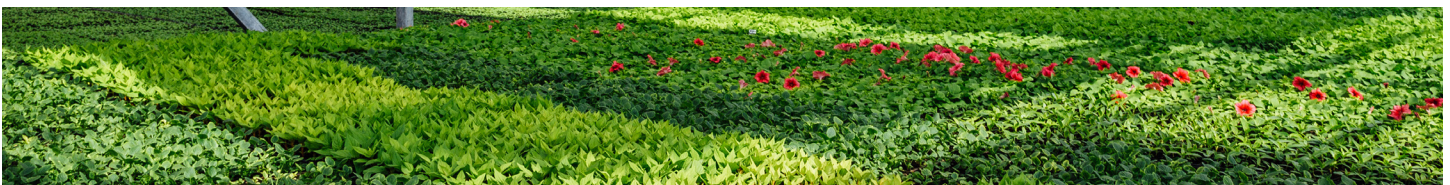
## TAVA Bench

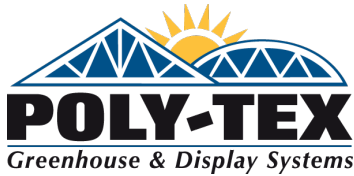


Almost every phase of plant cultivation requires transport of materials or movement of labor force. Recognized worldwide, TAVA Systems moving table solutions are greenhouse automation systems that take all aspects of your operation into account. TAVA and Agra Tech sales engineers will design and plan your bench project from the ground up, integrating transportation and even robotic components along with the greenhouse.

## Caster Bench

This is a high end bench on caster wheels that can be rolled out like a shopping cart to display crops. Agra Tech's Caster Bench is a rolling stackable bench that has a pre-welded frame. Bench tops are bolted to the stackable legs. Simply remove 3 bolts and then the tops can be removed and the bases stacked. Caster Benches typically have 13 ga. hot dipped galvanized Expanded Metal bench tops.





Whether you're growing, retailing, or throwing a party - Poly-Tex has got you covered. Not only are these structures economical but they also save you time and money while protecting your profits. Poly-Tex shade structures can be covered by many percentages of shade cloth to suit your growing and/or retailing needs and the needs of your plants.

## W-Truss Shade Structures

Shade with style! The Poly-Tex W-Truss shade structure has always combined strength with elegance. Now our new peak roof option allows you to add style to your garden center. It mirrors the look and feel of a greenhouse while increasing the expansive feeling of an outdoor retail space. Both roof options are still built on a frame that is one of the strongest retail shade structures in the industry. Why choose? Now you can have form and function in one structure. Available in sizes ranging from 20'x20' to 100'x200'.

### Very strong

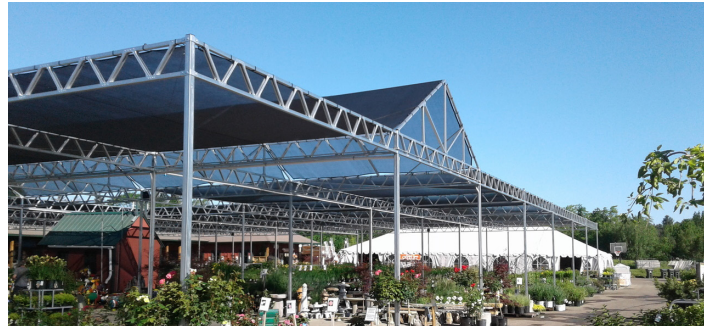
- Sturdy, horizontal truss allows for long spans between supports.

### Quick install

- Easy shade attachment system provides for quick installation and removal.

### Shade cloth

- A variety of shade cloths are available to provide the best environment



## SunStopper Shade Structures

The sun can be brutal on tender young plants. The Sunstopper will protect your valuable product from scorching and windburn while reducing water requirements. It features straightforward assembly, expandability and is built tough with 2.5" x 12 gauge, galvanized steel for years of trouble free service. Available in 10' x 20' and 20' x 20' standard blocks, the Sunstopper is also offered in custom configurations to meet your existing layout.

### Multipurpose structure

- Commercial or retail, the Sunstopper is a low-cost solution.

### Shade cloth

- A variety of shade cloths are available to provide the best environment.

### Quick install

- Easy attachment system provides for quick installation and removal.





## Poly-Tex BH3000

Get ready for Mother's Day sales with the BH3000 Basket Hanger. Display hanging baskets now and then use the optional wreath kit to convert it to a high-capacity wreath display during the holidays. This durable, versatile, year-round fixture is also available with optional casters and powder coating.

**Dimensions:** 72" w x 73"d x 82"h



## Poly-Tex BH4000

Does it look like frost? Respond quickly with the BH4000 Narrow Basket Hanger display. Designed for mobility, this unit comes standard with casters and rolls easily through a 36-inch door frame. Your merchandise will catch their eye even on the fly with the BH4000

**Dimensions:** 76" w x 34" d x 78"h

## Poly-Tex BW3000

Caution: Curves ahead! Enhance your garden center's flow with the new basket wave. This high capacity display provides an elegant way to showcase your hanging baskets in an easy-to-shop wall of color. Start with the 12-foot base unit and easily add 6-foot sections to create an endless sweep of color.

**Dimensions:** 150" w x 79"d x 78"h



## Poly-Tex BT3000

This fun way to showcase your hanging baskets and other hanging merchandise, such as wind chimes and birdhouses/feeders, is sure to be on your wishlist for spring sales. Think Vertical merchandising that can be shopped from any side. Imagine a tower of hanging baskets or a whirl of wind chimes!

**Dimensions:** 46" w x 46"d x 90"h

## Poly-Tex PX7020

A little variety can make a big difference. That's why we offer our PX7020 display. Shelf depth reduces gradually from 36 to 24 to 18 inches for improved product placement and visual appeal. Options like hanging basket purlins, casters, sign holder and powder coating allow for even greater visual range

**Dimensions:** 72" w x 73"d x 82"h

**Construction:** Galvanized Steel

**Capacity:** (24) 1020-style flats per 6-foot section

- Optional 47.5" high double purlin holds (12) 10-inch hanging baskets per 6-foot section



### Color Options



**Black, Red or Emerald Green Powder Coating**

Part#	Description
JPA119	Single Unit w/expanded metal (standard)
JPA122	Single Unit w/Double Purlin
JPA127	Single Unit w/Sign Holder
JPA130	Single Unit w/Casters
JPA132	Single Unit w/Casters + Purlin
JPA144	Single Unit w/Casters + Sign Holder
JPA150	6 foot extension for single unit
JPA217	6 foot extension for single unit w/Purlin
JPA222	6 foot extension for single unit w/Sign holder



## BENCHES & BENCH COVERINGS

### Nexbench



Nexbenches use a specially designed aluminum perimeter rail and Nexsteel tubing to be a flexible and strong bench system. The benches are either stationary benches or a rolling top bench. The rolling bench uses a single floating aisle to allow for more bench square footage inside the greenhouse. These benches are durable enough to be used in commercial growing operations and attractive enough to be used for retail displays. The tops can be covered with different coverings depending on the end use. For ease of erection and maximum strength, all tops and leg frames are factory welded with no nuts and bolts required

### Dramex Coverings



- Dramex expanded metals for greenhouse bench tops are designed to be structurally strong but lightweight for ease of handling.
- The open mesh provides free passage of air, prevents accumulation of excess moisture and sediment and keeps benches clean and dry.
- Insects are discouraged by the metal surface.
- Provides years of maintenance free use
- Available for rolling and stationary bench systems.
- Available in galvanized steel and aluminum.
- Dramex style 3/4 - 13 hot dip galvanized
- Flattened styles also available for flats and trays.

### A-V Lifetime Bench Systems



- 20,000 psi Fiberglass; stronger, lighter and more durable than wood
- Resists weathering, will not rust
- U.V. protected
- Easy to clean and disinfect
- User friendly and easy to assemble
- Permanent or removable legs for compact storage
- Design and size flexibility
- Easy interlocking assembly
- Installs on any type of frame

### Bench Mesh Coverings



This extraordinary "galvanized-after-welding" mesh delivers all the strength you need and our latest innovation, the Channel Bench Top, allows internal placement of all heat and irrigation tubing so they move when the bench moves, without interfering with the bench top. Better yet, the bench top is less expensive than other fabricated bench frames and requires less labor. Channels are supplied loose, to be installed in the field or pre-assembled to bench panels. Palletized systems are also available. Channel spacing determines the load that can be supported, so we can make a bench so rugged you can walk on it.



In 1986, Total Energy Group founders Peter Stuyt and Bert Neeft settled in Carpinteria CA, a thriving community of greenhouse flower growers. Bringing Dutch greenhouse technology and expertise to the area, they started installing light deprivation and shade systems for growers looking to automate and save energy. Working with growers, greenhouse manufacturers and distributors, has driven flexibility and innovation.

## Light Deprivation Systems



**Complete black out provided by Total Energy Group's fully automated Light Deprivation Systems.**

You can expect our light deprivation systems to make your crop flower reliably, securing the steady production flow modern greenhouse operations want. Our systems can be engineered to fit a wide range of greenhouse types and styles.

## Shade Systems



**Sun protection and energy savings provided by Total Energy Group's fully automated Shade Systems**

During the day time our systems will protect your plants from receiving too much light and heat, creating a growing environment in which your crop will thrive. At night closing the system will save on nighttime heating costs by containing the heat underneath the shade cloth.