

Green House GH-36

Green Houses for agricultural farming with any climate conditions



Features and Benefits

- Metal structure.
- Side and roof covered with polycarbonate transparent sheet of thickness 4mm.
- Cooling pads are long lasting with 100mm thickness.
- Low water consumption
- Ventilation fan of 1.5HP and 380VAC.
- Easy to operate and clean.

Description

Green House Models:

A. Single Span Tunnel Greenhouse

It consists of a stainless steel galvanized metal structure, with a polycarbonate cover that can resist the sun, wind, and rain. The cooling system contains two cooling fans and 8m cooling pads. The heating system is 30 to 60kw gas heaters. The climate control to manage the greenhouse system (heating, cooling...).

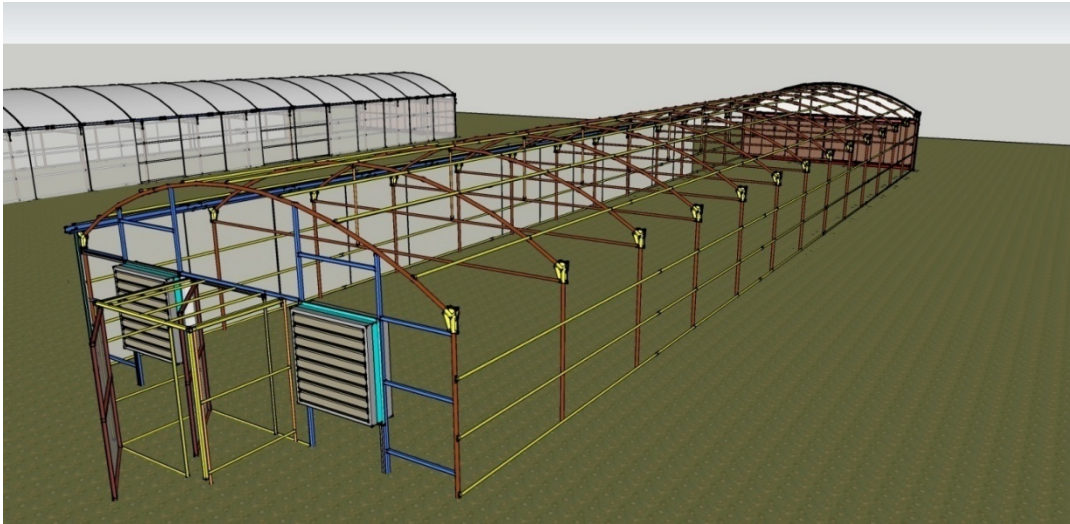
The structure single greenhouse range (8-16-24...) meters.



B. Multi-Span Tunnel Greenhouse

Multi-span is a multi-purpose greenhouse structure with vertical sides and interconnected gutters which can be used for a variety of crops. Due to the high roof, it is easier to control the temperature. It can be covered with single polyethylene 4mm sheeting. We offer various sizes and can, manufactured to the specification as well. The structure is either naturally ventilated with roof and side curtains, or have a pad and fan cooling system with environ watch digital control boards. The structure single greenhouse range (8m-16m-24m...). We build multi-span greenhouses from 500-3,500 m² in size.





Metal Structure:

- A metal structure consisting of columns of 2" galvanized pipe with 1.8mm thickness.
- Arcs of 2" galvanized pipe with 1.8mm thickness.
- Long side pipes 1" galvanized pipes.
- Cooling pads frames made from galvanized sheets AWG 16.
- The structure of the double door with buffered room at the front of the hall. Made of tubes and GI angles.

Insulated Doors:

Robust door-post with a flush threshold in thick isophthalic resin; door-panel insulated with injected polyurethane, thickness 10cm; supporting frame in stainless steel, thickness 12/10; covered with galvanized plastic-covered sheet; gas-tight sealing with neoprene rubber gaskets; electro-statically galvanized steel running wheels with ball-bearings; prepared for automation and opening to left or right.



Columns:

The column's height is 2m and maximum arc height is 3.5m, the distance between each column is 2.5m, the foundation from concrete 40cmx40cmx50cm and space is 2.5mm from each other

Greenhouse Roof Drainage:

As we build more and larger greenhouses, roof drainage becomes a factor that needs to be addressed. Rainfall that normally soaks into the soil and becomes groundwater is converted to runoff. Paved driveways, parking and storage areas also add to this total.

Outside Covers (Polycarbonate Sheets):

Sides and roof covered with polycarbonate transparent sheets thickness of 4mm processor against UV rays on both sides and weighing 0.9kg/ m² and strongly withstand wind 1KN/ m² and the degree of ignition B1. Polycarbonate sheet for a greenhouse has become very popular in the recent past than other materials such as glass due to the following reasons:



They have better insulation properties, heat retention is an essential aspect for better results to be realized from any greenhouse.

The polycarbonate greenhouse sheeting is manufactured with different types of wall to achieve varying insulation requirements.

Cooling System:

A greenhouse with a pad and fan cooling system will have extractor fans on one wall and on opposing wall it will have an evaporative wet wall (pad) that lets air in through a fine trickle of water.

The evaporation of the water will cool the air that is being sucked into the greenhouse though the wet wall pad and the fans will pull it right through the greenhouse, cooling the entire greenhouse inside.

This is an explanation in its simplest form and there are many factors influencing the effectiveness of pad and fan cooling for example outside humidity, crop length and the distance from the fan to the pad.

AFEM has many years of experience in pad and fan cooling and works closely with the best manufacturers.

A. Cooling Pad

1. Cooling pads (100mm thickness CELDEK 7090-2000-600-100)
2. Cooling wall dimensions (2m height x 8m width)

B. Ventilation Fans

1. Ventilation fan 1.5HP, three phase, 380V, and 50HZ
2. Central hub and v-belt pulley are made from die-cast aluminum with reinforced ribs for a prolonged lifetime.
3. Reduced stress on motor bearings.
4. Class A motor featuring excellent, efficiency and low energy consumption.
5. Each motor is individually tested for 100% quality control.
6. Fan housing and venture made strong galvanized sheet-steel.
7. Welded wire guards designed for easy maintenance fitted with noise reduction supports.
8. The propeller is statically and dynamically balanced.
9. Shutters are made of pressed galvanized steel in order to ensure the highest strength.
10. Shutter bearings are maintenance free.



C. Water Pumps

1. Powerful single-stage centrifugal pump with a maximum flow rate up to 90L/min.
2. Single-phase power 1hp diameter of the inlet and outlet of the connector 1"-1".
3. A good suction capacity and high durability.
4. Suitable for pumping water, automatically allocating water in small tanks and irrigation in small medium large garden areas.



D. Water Tank

1. It is made of polyethylene three layers, different capacities start from 200 to 1,000 gallons.

E. Climate Control

1. Create a healthier, more comfortable indoor climate for your greenhouse, cold frame or high tunnel.
2. Slash energy costs and receive the maximum benefits year round inside your greenhouse with our temperature monitors, thermostats, and controllers.
3. Accurately and automatically control your retail or growing environment with sousaphone programmable environmental monitors.
4. Maintain optimum conditions for your plants, flower, and vegetables with our thermometers, soil probes, and soil testers.
5. For greenhouse irrigation, watering, fogging and cooling, we recommend aqua cool environmental systems (configure your own system to fit your growing needs).
6. We also carry waterproof thermostats and timers, greenhouse alarms and humidifiers.
7. Our climate controls are with a single temperature sensor or two-stage output.

Heating System:

Why heat a greenhouse?

Heating a greenhouse is to sustain plants and the growth of its year round. There are many different styles and sizes of heater and heating system available. We at ADHAM Farm© offer a variety of heating solutions at competitive prices for the hobbyist grower as well as for the commercial grower for both flower and vegetable market.

LPG propane gas space heater 30kw automatic ignition with digital display, Thermostat control CE, ROHS.



Irrigation System:

Automatic drip irrigation is a valuable tool for accurate soil moisture control in highly specialized greenhouse vegetable production. Total automation of drip irrigation offers a simple, precise method for sensing soil moisture and applying water. Management time savings and the removal of a human error in estimating and adjusting available soil moisture levels enable skilled growers to maximize net profits.

Available soil moisture is an important limiting factor in growth and productivity. Greenhouse vegetable growers commonly estimate the availability of soil moisture by plant and soil appearance. Slight wilting of succulent terminal leave indicates water stress in plants. Growers squeeze a handful of soil taken from near the surface at several locations in the greenhouse. Soil that does not stay compressed in a tight ball is considered too dry.

Each house includes multi irrigation lines in which each line includes several water drips. The distance between each is 0.5m also there is a gate valve to control the flow of water in each line separately.



Fertilizer Injector:

Fertilizer pump mounted directly on the pipe, the kinetic energy of pipe flow to drives the pump to work at a set ratio to suck high concentration drug or quantitative fertilizer into the pump after mixed with the water and delivered to downstream. No matter how to change the water pressure, drug or fertilizer will be mixed and discharged according to a certain proportion. The flow rate of 25m³/hour



All photographs, measurements, and descriptions are provided without engagement. We reserve the right to make modifications at any time

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