Judy

The modern greenhouse's structural design and its application example

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Improved solar greenhouse

Large glass greenhouse

Modern greenhouse

Development

Gutter connected greenhouse

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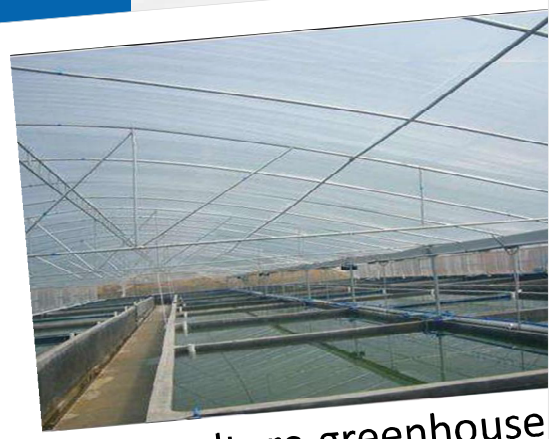
Planting greenhouse



Aquaculture greenhouse

Scientific research & teaching greenhouse

USE

Plant ornamental greenhouse

Ecological restaurant greenhou

Inspection & quarantine greenhouse

Type

Thin film greenhouse

PC board greenhouse

Glass greenhouse

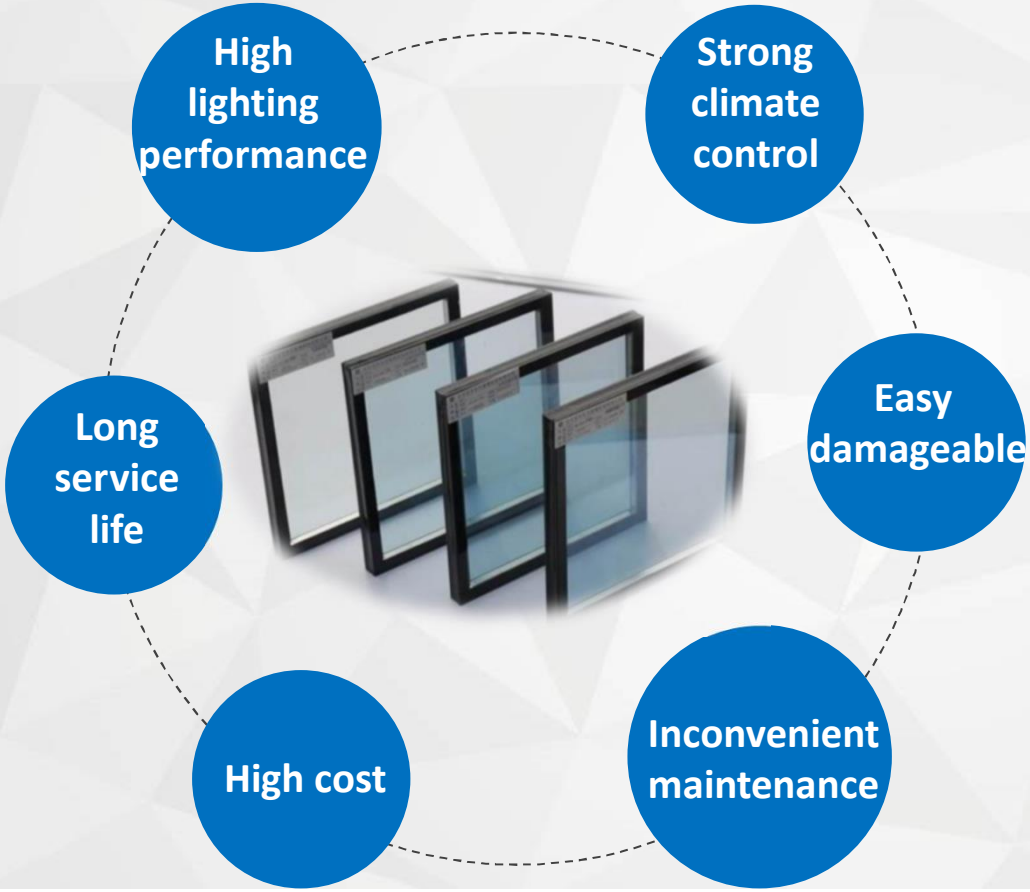
Covering Material

Characteristic

Thin Film Greenhouse

- Low cost
- Easy to build
- Easy to pollute and aging
- Poor transmittance

Characteristic



Glass Greenhouse

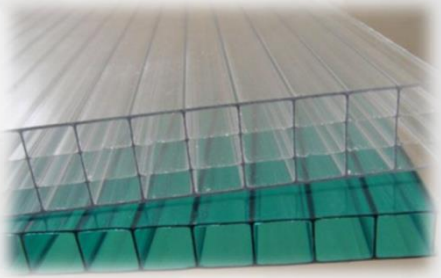
Characteristic

PC board Greenhouse

Strong

Hard to pollute

Durable



Thickness (mm)	2.0	3.0	6.0	8.0	10.0
Colourless Transparent plate	99	88	83	82	80

Type

Single-span greenhouse

Size

Multi-span greenhouse

Characteristic

Single Shed

A lowest cost

B simplest construction

C used in the southern region

D resist snow

E mechanization

F scale

G used for some regions with rich labor

Characteristic

A simple facility

B solar energy

C covered with quilt

D good heat preservation

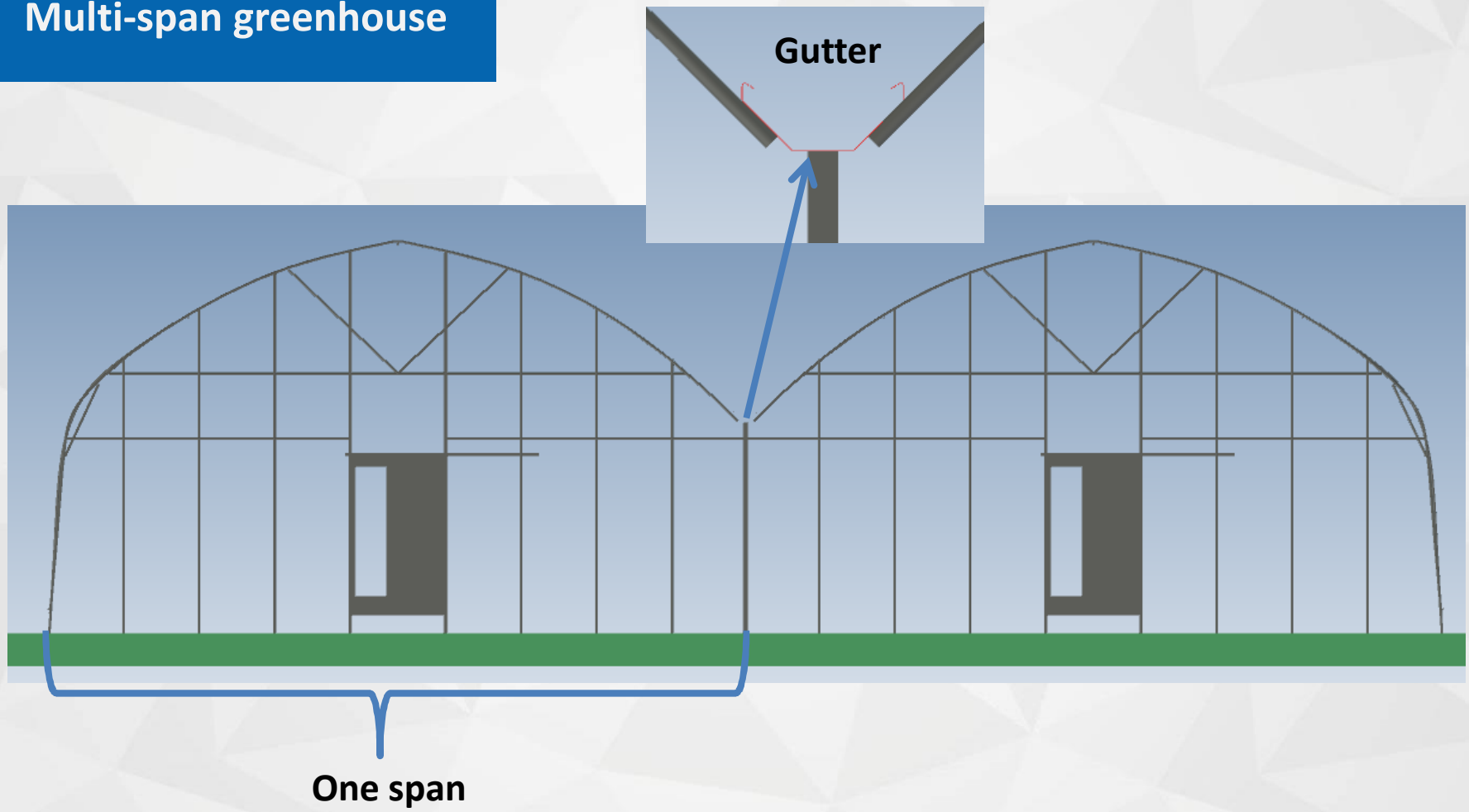
E low investment

F energy saving

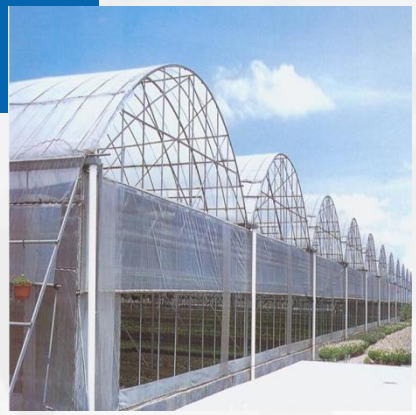
G underdeveloped rural areas

Single-sided Slope Sunlight Greenhouse

Multi-span greenhouse



Type

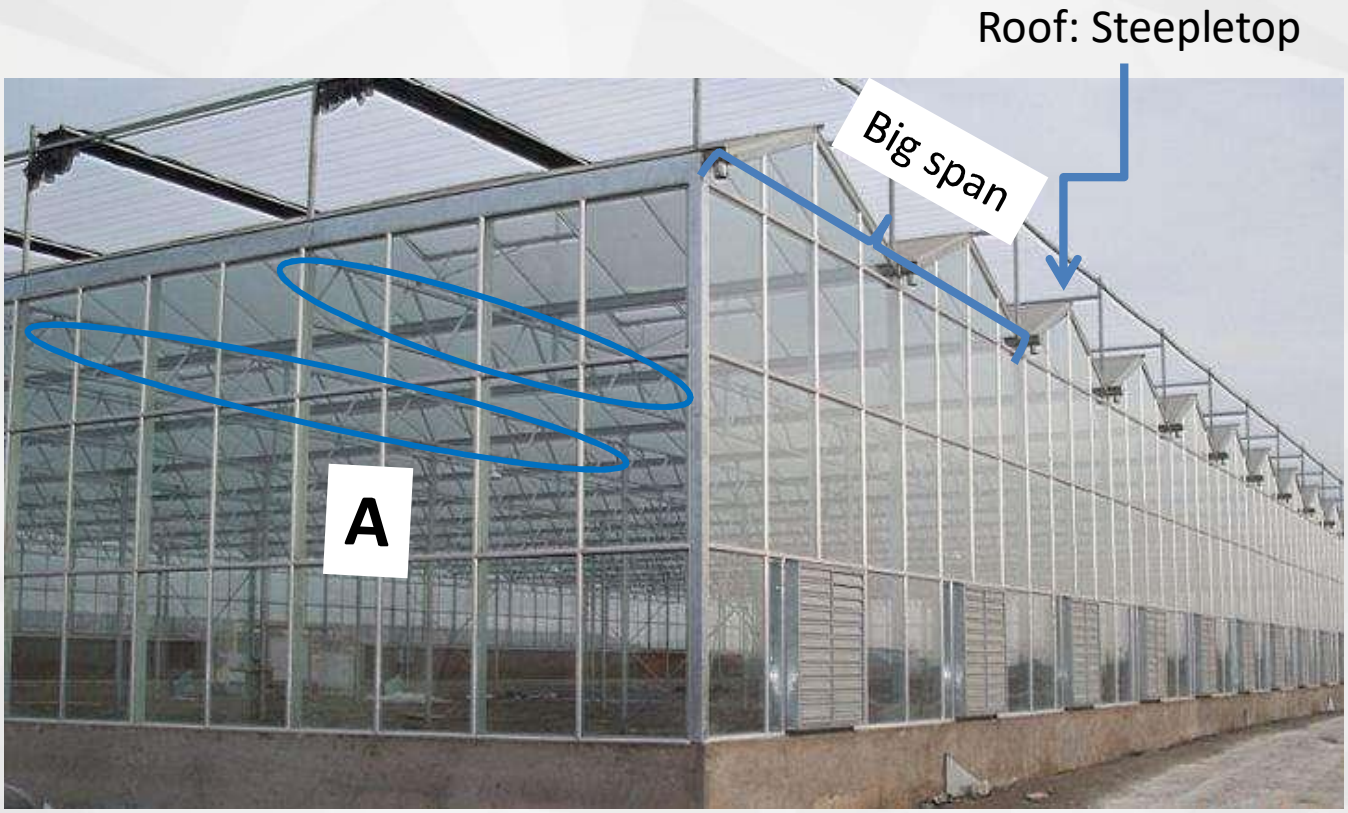


Fastigium greenhouse → Arched greenhouse → Sawtooth greenhouse → Venlo greenhouse

Roof Shape

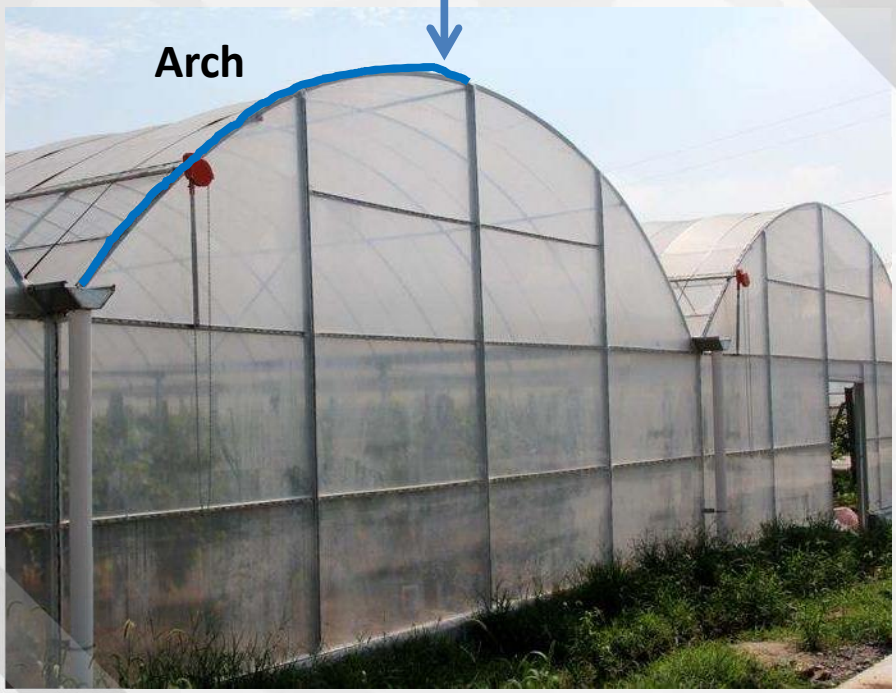
Fastigium greenhouse

Venlo greenhouse

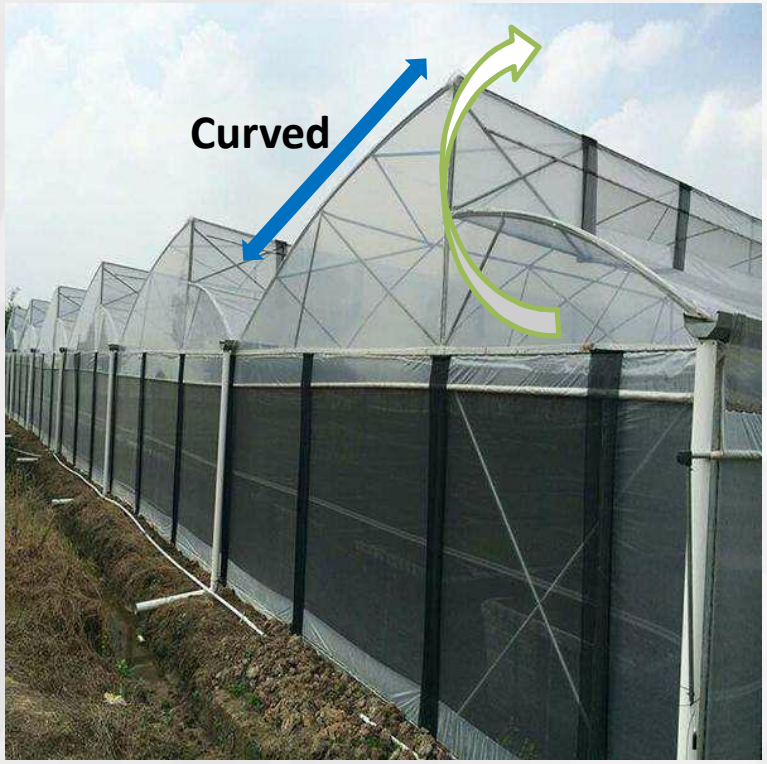


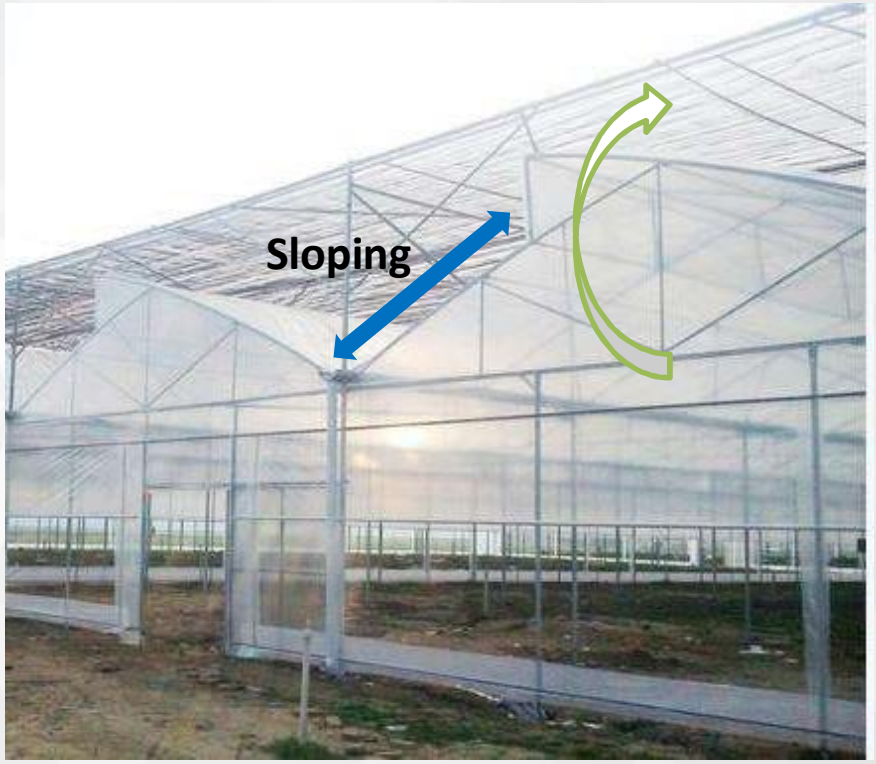
Arched greenhouse

Roof: Round arch



Sawtooth greenhouse

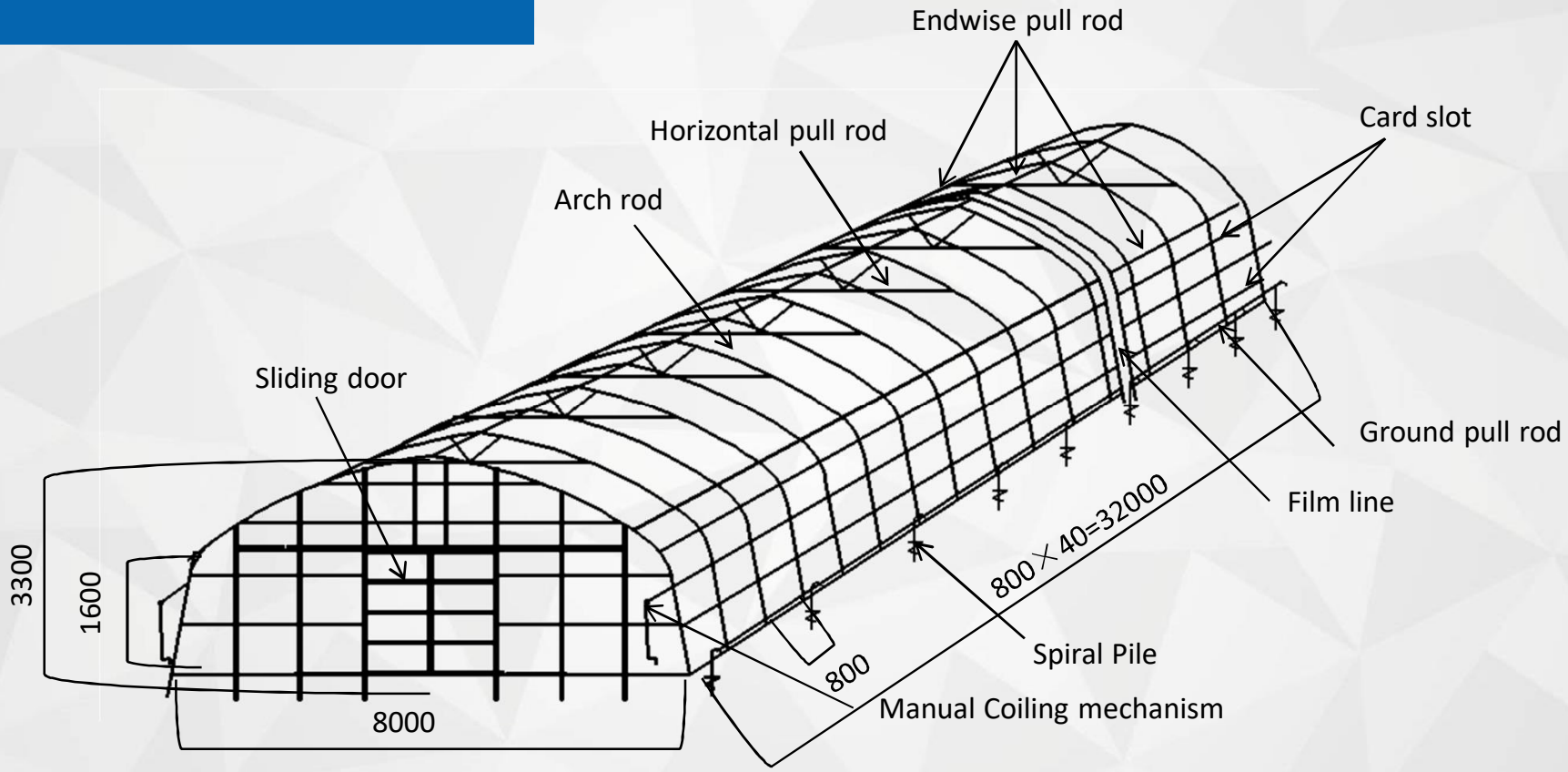




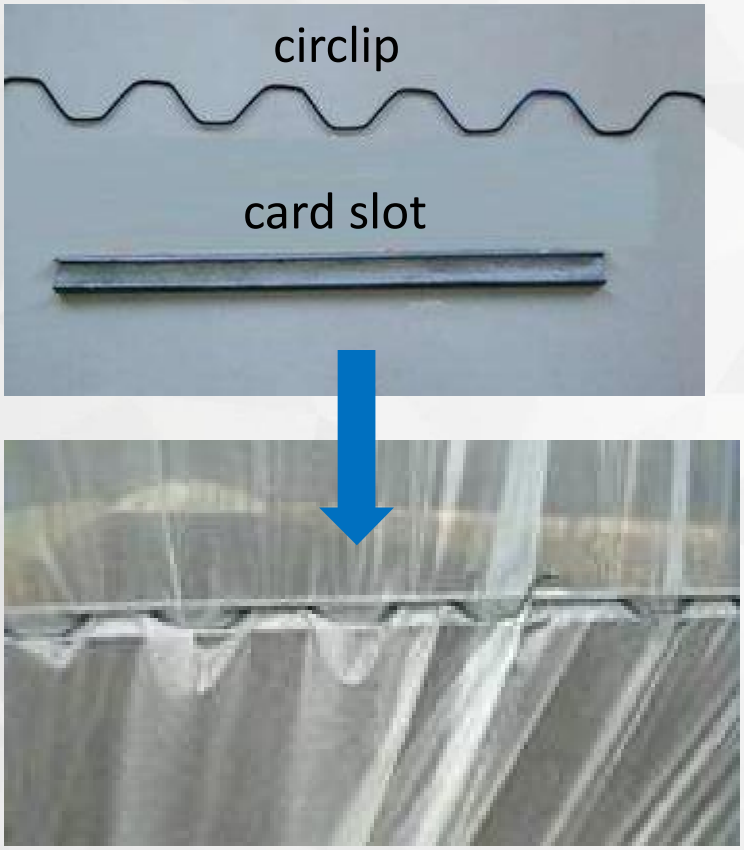
Standard in shanghai: GP-C832Z

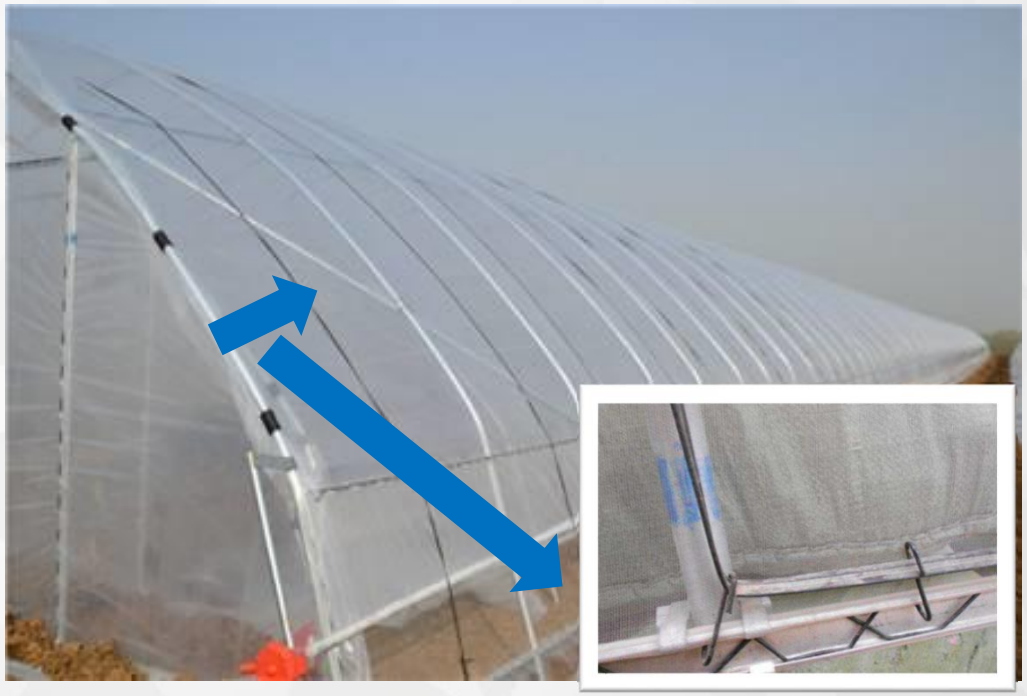
Structural parameters——Span:8m, arch spacing:0.8m, height:3.3m, length:<_40m.
performance parameter——wind load:≥0.45Kn/㎡, snow load: ≥0.15Kn/㎡, service life:≥10 yesrs.
Ventilation mode——two sides manual Coiling mechanism.
Main material——Galvanized steel pipe.

GP-C832Z shed



GP-C832Z: parts





Standard in shanghai: GSW8430

Structural parameters——Span:8000, arch spacing:4000, top height:4000.

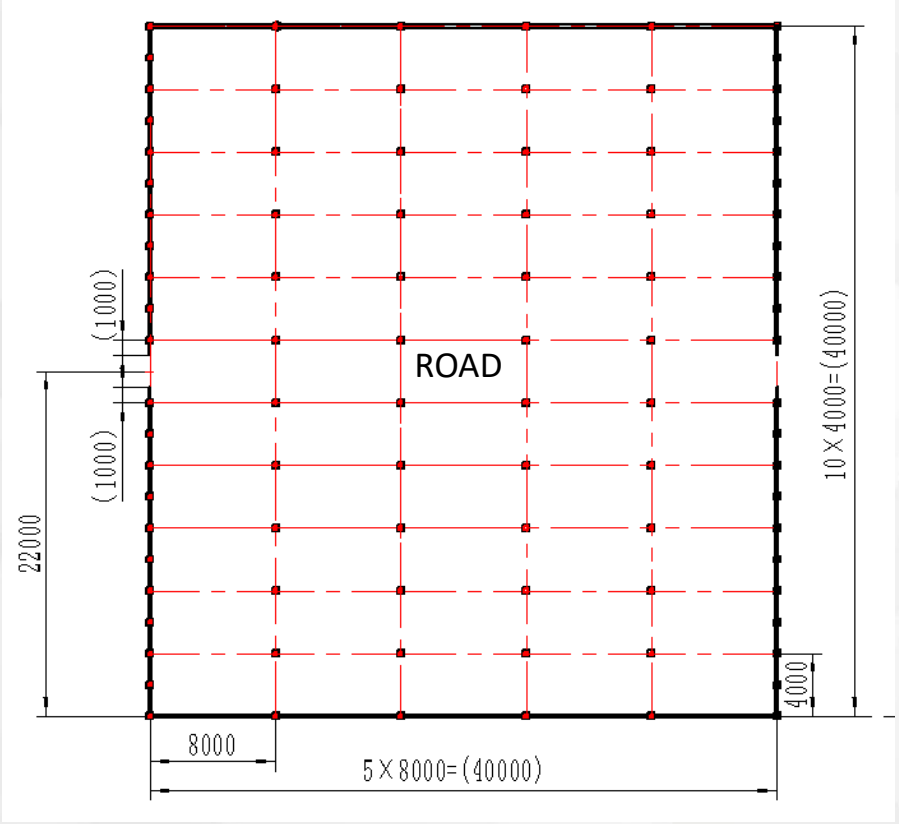
performance parameter——wind load:≥0.55Kn/㎡, snow load: ≥0.25Kn/㎡, service life:≥15 yesrs.

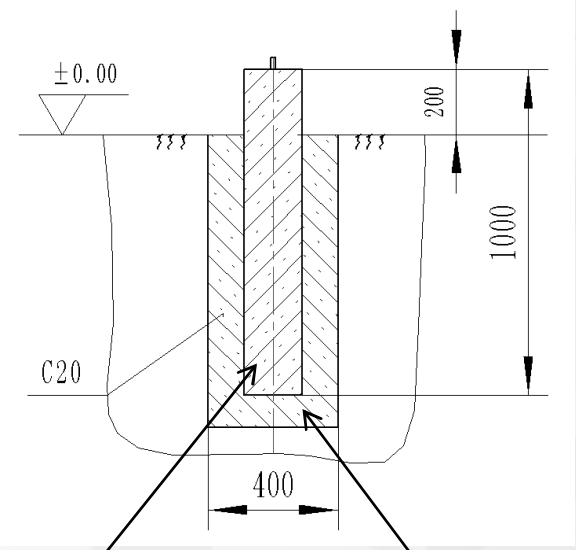
Ventilation mode——Electric skylight, manual Coiling mechanism.

Main material——main arch: Rectangular Vice arch: Galvanized steel pipe.

Rising and cooling methods—— internal heat preservation system, outside shade system

Civil engineering part

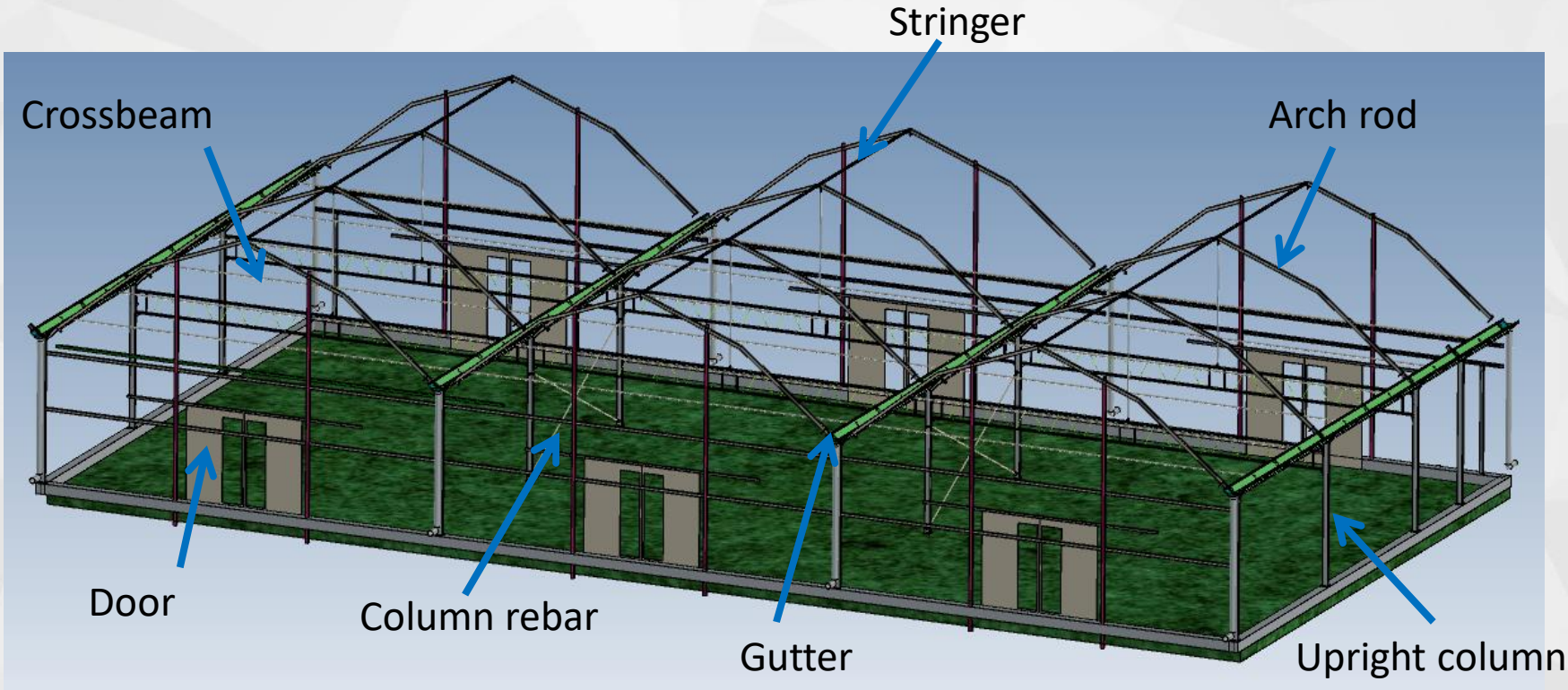




Independent foundation

Delve foundation

The frame of greenhouse

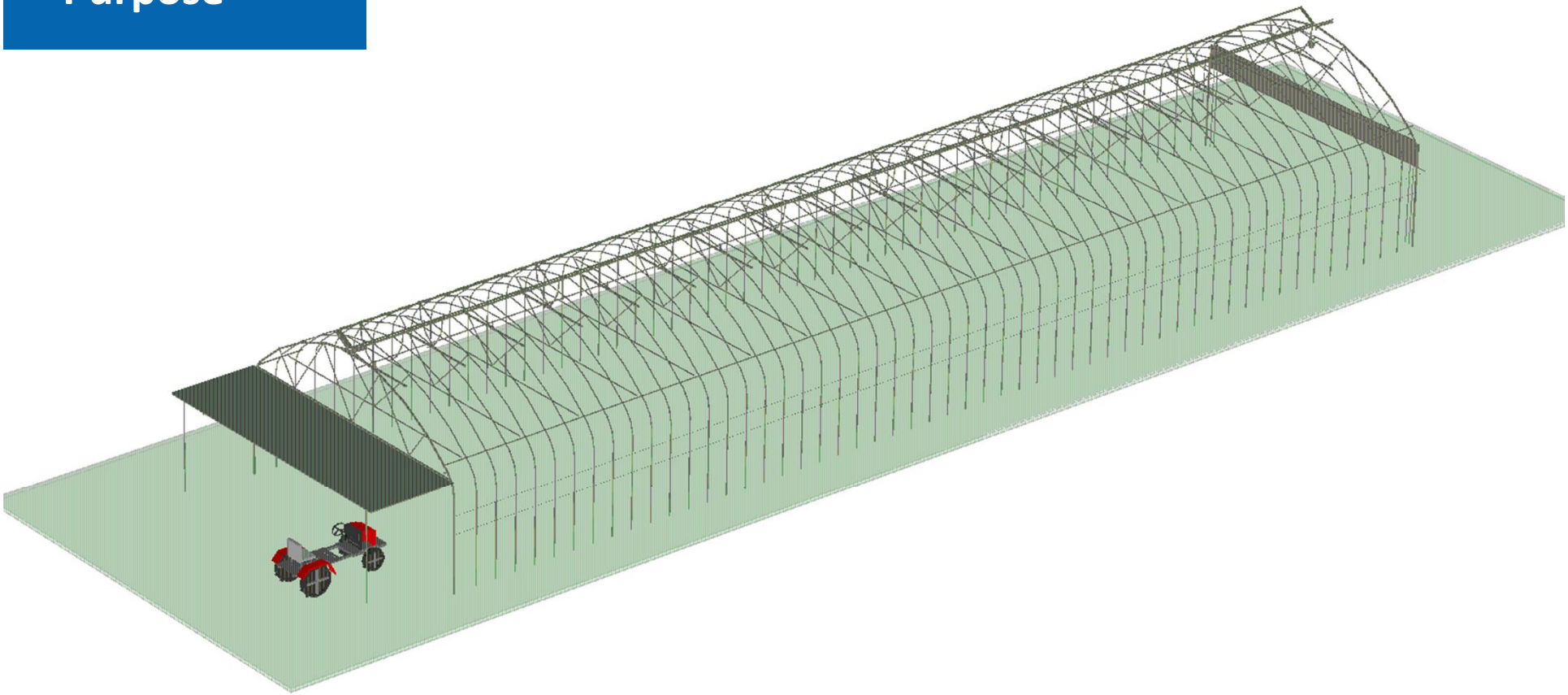


GSW8430 multi span plastic greenhouse

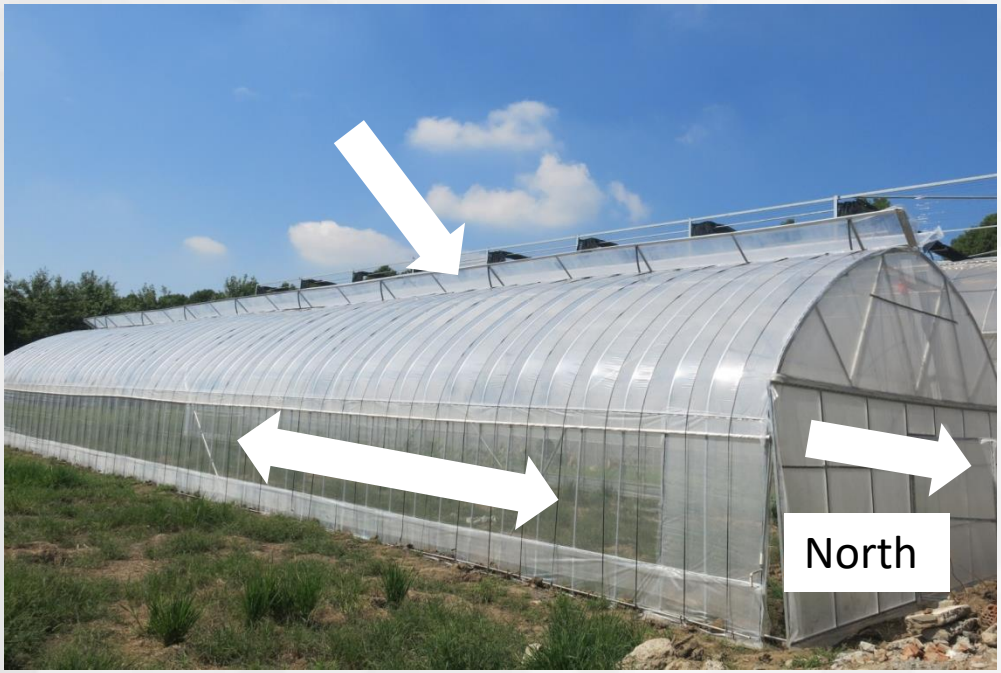
Key point of design

1. the orientation
2. the length
3. the width
4. the high span ratio
5. the vent ventilation

Purpose



Example:A single shed suitable for mechanization



Structural parameters——Span:8m, arch spacing:0.6m,shoulderheight:2.5m,height:4.1m, length:32m.

performance parameter——wind load:≥0.45Kn/㎡, snow load: ≥0.15Kn/㎡, service life:≥10 yesrs.

Ventilation mode——Electric skylight, two sides manual Coiling mechanism.

Main material——Galvanized steel pipe.

Full open

Thanks For Listening