

GROWERTALKS

Features

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Strength Through Technology

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Here are some of the things we've learned and questions we get asked that may help as you plan your next project.

1. The gauge of steel that is used in your structure is important. Slight changes in thickness and shape can result in significant differences in strength. While using lighter-gauge steel and extrusions can reduce the cost of the structure, it usually comes at a cost of structural integrity and longevity of your investment.

2, What's a wind or snow load rating and why are they important? Structural Design Criteria are established by codes based on historical data of the local climate and enforced by local building departments. There are many factors that can affect the values used in design based on parameters outside as well as inside your structures. Snow load ratings can vary based on specifying "ground" or "roof" snow loads. Ground snow load is the "base" value and is used to determine roof snow loads that are applied to the structural design. The roof snow load values are reduced by a variety of factors that include occupancy, exposure and thermal factors.

Just because a greenhouse is rated for a 30 PSF snow load, doesn't make the design strength equivalent to another greenhouse with the same rating. The factors that apply to a seasonal growing house don't necessarily apply in a retail facility. If you're interested in protecting the investment in your structures, as well as your inventory, it's important to select a manufacturer that will research your local building code and offer greenhouse solutions personalized to not only your local climatic conditions, but also to your current and future vision for your business.

Even if your greenhouse structure isn't required to meet a full structural loading, the design criteria for your local area is still a good baseline for design. And working with a greenhouse manufacturer that knows what your local code is can help provide a structure that not only meets your budget, but will also provide the best protection designed for your location within that budget.

3. Capital investment decisions require more than getting the lowest price. Quality is very important. Although many domestic and foreign greenhouse manufactures offer high-quality structures, it's important to understand the levels of design that each manufacturer has to offer. Although simply adding additional

supports and increasing the heat level inside greenhouse structures can often effectively brace for the impact of a snow event, weather is not always predictable, and time and availability of electricity aren't always in your favor. There's a balance between profit margins, inventory and short-term risks, but it might be that a little additional investment in a higher-quality structure can not only reduce certain risks, but also maintain a strong eye to the future of your business.

4. If you're building or even renovating your greenhouse structure now—knowing that you'll be adding features to it later—you'll save money in the long run if you build and design for those things now (i.e., putting in energy curtains at a later date). Putting curtains higher allows most shade systems to be installed with ease. As we all are trying to become more efficient in our processes, technology is becoming increasingly important in all areas of our lives, and greenhouses aren't excluded.

There are options for equipment that can automate just about any process and looking ahead at what might be required for the types of systems you're interested in can save time and money later. A few structural factors that could be important for planning for added features are structure span, height and column spacing. Is there a certain width or length that can help maximize efficiency? Do you need an extra few feet in height to add a hanging basket system or watering boom? Are you going to need beams for wider aisles to allow equipment access? It's impossible to know what the future holds, but long-term goals and plans can be beneficial, even if the future doesn't pan out as we expected.

Q How does Nexus continue to develop new products that are innovative and answer today's grower demands?

A Cheryl Longtin and Mike Porter, the owners of Nexus, had over 40 years of combined experience in top international corporations when they bought the company more than 20 years ago. That experience has given them the background needed to not only adapt to changes, but to take leadership in the structure business. They purchased Nexus because it was the industry leader and its leading edge came from its strength in technology. These traits were consistent with the companies they came from and their own strengths. They have kept the best of the old, and challenged the sacred cows and made changes that have expanded product line offerings resulting in profit-enhancing choices for the customers.

Cheryl and Mike are committed to strengthening the technical leadership of Nexus. Close interaction of the Nexus team with our customers allows the company to continue to introduce leading-edge products that reflect emerging-industry requirements at a fair price. There's a history of products that Nexus has designed and manufactured that stays ahead of the needs of the industry.

As the technology leader in the greenhouse industry, Nexus introduced technology and established relationships that were revolutionary at the time and each year challenged themselves to provide what our customers need. In 1995, Nexus introduced the Zephyr greenhouse (natural ventilation at its best). In 1996, Nexus announced the Convertible Roof, which can be adapted to a hard covering at a later date and the Drop Down Curtain System designed to fit all Nexus greenhouses.

In 2001, Nexus announced the Clear Sky Greenhouse with the unique patented Nex-Hood, which allows the roof to partially open during inclement weather. In 2003, the company announced the Atrium Vent, designed to improve air movement in retail environments. Then came the Bright Sky Greenhouse with superior humidity

control and high light properties. The Dual Atrium was introduced in 2004 to even more enhance the natural ventilation customers needed. The following year the company introduced the Guillotine Vent that is a vertical vent window system.

Customers expressed a need for benching options and Nexus responded. Benches can be either stationary or rolling tops. Benches can be customer-friendly with an attractive retail look that are aluminum and easy to move. A full line of self-watering benches that make a garden center less labor intensive and save money was introduced.

Traditional structures or cookie-cutter solutions are a thing of the past. Nexus continues to change and adapt to our customer's needs. Every day our engineers and management team plan for today and the future.

Q How has Nexus served as a steward for quality products?

A Every year, Nexus is ranked number one in engineering, customer service, value for product dollar and technological leadership in independent surveys. We work on committees for the National Greenhouse Manufacturers Association to provide leadership for matters regarding zoning, standards and defining things like snow and wind loads.

Q What's new in technology that affects our industry?

A Today, the company is working on industry-leading projects, such as rooftop facilities for educational facilities, apartment buildings, growers and municipalities. Our world needs to use urban areas for growing and the rooftops are the perfect answer. This kind of project requires a highly trained and educated engineering staff. We have the largest engineering staff in the industry with Professional Engineering stamping ability in 49 states and two Canadian provinces. **GT**

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