

# Trend Spotting: Structures



Manufacturers feel open-roof greenhouses — both 100-percent and partially open — are likely to continue being popular. (Photo: Nexus Greenhouse Corporation)

Learn what some of the industry's greenhouse manufacturers see as this year's key trends in structures.

## By Meghan Boyer

Each year, *GPN* reaches out to the industry to find what is new in greenhouse structures. Greenhouse manufacturers travel the globe looking at structures, field requests from growers and construct houses large and small, making them experts in terms of industry structure trends.

The past year has shown that a \$2 gallon of gas is a thing of the past and Mother Nature can unleash unimaginable destruction upon entire cities. While these topics affect the nation as a whole, they directly affect growers and, in turn, their structures. With rising costs on their minds, these greenhouse manufacturers described the current market (still slightly conservative), growers' structural choices (natural ventilation) and the popular covering (glass), in addition to other key trends.

### Current Trends

**Open-roof greenhouses.** Open-roof greenhouses — both 100-percent and partially open — are a current trend that is likely to continue in the future, said Jeff Warschauer, vice president of sales at Nexus Greenhouse Corporation. In fact, growers are opting for natural ventilation as a whole. Open roofs are popular because people

want the freedom they allow, Warschauer pointed out. At times people will choose partially open roofs instead of 100-percent open because there are less moving parts (and often less costs) but light still comes in and humidity goes out.



Manufacturers have seen a continuation of high sidewall and gutter heights and an increase in gutter-connected houses among bedding, vegetable and potted plant growers. (Photo: Rough Brothers)

**Fan use.** In a related trend, manufacturers have noticed growers are moving away from mechanical cooling. "[There are] very few fan ventilators right now," said Bill Vietas, commercial division manager for Rough Brothers. In general, growers have found that installing, running and maintaining mechanical cooling equipment results in extra costs.

Warschauer has also noticed an overall reduction in fan use. Though, there are instances where he sees growers using them. "You might see some people put a small fan in the peak [of a greenhouse] for dehumidifying in bad weather."

**Insurance problems.** Last year's hurricanes have affected insurance premiums, which is preventing some growers from being insured, said Linda Barnett, vice president of sales, and Greg Lahue, a sales manager, both with Stuppy Greenhouse Manufacturing, Inc. In addition, some insurance companies are now requiring stronger structures before they will issue policies; Vietas noted that growers in Florida have started requesting higher wind loads, because without increased load capabilities, some will not be able to put a structure up or get it insured.

**The whole package.** As greenhouses are built, manufacturers are including equipment-ready functions more frequently. Jen Hickson, director of public relations for Private Garden, said growers want the actual systems installed as well: "They also want us to install heating and cooling systems, display fixtures, benching, environmental controls and most of the items that help them operate."

**Environmental controls.** Control in general is very important to growers, especially those with open-roof designs. "Controls have become paramount in these naturally ventilated greenhouses," Warschauer stated. The environment inside and outside the greenhouse can change quickly, and growers are not always present to react to changes; the controllers manage their systems — from opening and closing the roof to adjusting the temperature — while they are away. If a 60-mph wind comes up while the roof is open and the grower isn't there, he or she wants to know that the roof will close as needed, said Warschauer.

**Double curtain systems.** Double curtain systems are becoming a popular means of battling rising heating costs, said Warschauer. Depending on the types of fabric used, the systems can allow greenhouses to save heat and still get the light levels they need. Warschauer estimated a 25-percent savings on the fuel bill in a structure that recently had a curtain system installed.

**Other trends.** Other trends manufacturers mentioned include a continuation of high side-wall and gutter heights and an increase in gutter-connected houses among bedding, vegetable and potted plant growers.

## Choosing Glass

The manufacturers said that those who have the means to construct high-end structures are choosing glass over other glazing largely because of glass's light transmitting capabilities. "The trend is away from double-poly and struc-

ture sheets such as polycarbonate and acrylic. Glass, which is a permanent and will not yellow or need to be replaced, is the glazing of choice," explained Hickson. She and Joe Hickson, president of Private Garden, feel growers find glass quite appealing because it can be clear, opaque, bronze or other shades.



Some growers are using curtain systems to battle rising energy costs. (Photo: Stuppy Greenhouse Manufacturing)

Warschauer agrees: "More and more people are looking at glass since it has come down in price so much in the last few years." He feels growers appreciate the higher light capability and durability. "There's glass around today that was put up in the 1920s and 30s, and it wasn't even tempered back then, so it's pretty durable, pretty permanent."

For those who cannot afford glass initially, some structure companies now offer poly-roof houses that can later be converted to hard cover — though this can be an expensive transition, Warschauer noted. Customers have to discard excess parts during the conversion. "When you look at our poly-open roof or our hard-covered open roof, there is a lot of framework in there that you won't use when you put a hard cover on it," he explained.

## Money Matters

Overall, the manufacturers I spoke with feel the structure market is leaning toward the conservative side, with energy costs, labor prices, immigration reform and fluctuating seasonal business success on growers' minds. The affect of these concerns has led to budget-conscious structure decisions: Growers are weighing costs against perceived value with everything from the types of coverings they choose to when to build a new structure.

Barnett and Lahue have noticed growers are not asking for quotes like they did in the past, and those that are inquiring about new additions or builds have been doing so for awhile, waiting for lower prices. "People are putting off new construction as long as possible," noted Barnett.

Increasing energy costs that are putting a strain on growers' budgets are also affecting their construction decisions. Growers are realizing that energy costs are not going down, and they must adapt or face increased financial strain in the future. "It [rising energy prices] is forcing some people to build...to get energy efficient," said Vietas.

Vietas noticed growers are adapting to rising costs by either putting up high-end structures or expanding with poly houses. "Structure-wise, if you need more production space, you can add on with more efficient energy and more efficient forms of labor, but that usually translates into a higher capital cost from your structures. Or you can go into less expensive [structures] and possibly have more operating costs as you go," he explained. **GPN**

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