## **Ask Jon Eakes**

## Can you use Low-E glass for a greenhouse?

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John has some old Low-E windows and wants to know if he can use them to build a greenhouse. Well there seems to be a lot of controversy in the window and greenhouse businesses about this. Any coating on a greenhouse window will change the light that reaches the plants, and there are several types of Low-E coatings. So the question is, will the energy efficiency aspects of Low-E glazing override the potential light change for the plants? There don't seem to be any real clear answers to this one. But we did dig up some interesting bits of information. Some protection from UV light is good for workers who spend a lot of time in the greenhouse. Many greenhouse gardeners worry that heavy UV and other filtering will affect the health of the plants, but without a lot of data to back that up. Even clear glass filters some of the sun's rays. The standard for greenhouse glazing is double or triple polycarbonite plastic panels, with air in between the layers. Double polycarbonite or single glazed glass are normally used in the milder regions of Canada, and triple polycarbonite or double glazed glass in the colder regions. When glass is used, it is usually not standard window glass, but tempered glass. It is stronger, and if it does break overhead, it shatters into harmless little pieces. This alone is a good argument against using old windows, at least for the overhead glass. The larger greenhouses take the attitude that they don't want permanent filter layers on the glazings of their greenhouses (Low-E is permanently on the inside of the double pane) but would rather be able to open to full light, or shade with indoor shades if necessary.

## **Keywords:**

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