

POLYETHYLENE FILM FOR GREENHOUSE ENCLOSURES

DISCUSSION

Flame-resistant fabrics conforming to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films" are designed to be use for tents and air-supported structures. Use of such materials for commercial greenhouses would be detrimental to plants due to the materials ability to block out the majority of the ultraviolet light necessary for proper plant growth.

For commercial greenhouse facilities, several types of polyethylene films with special additives for greenhouse use are available in the market but they do not meet the ULC criteria. The purpose of this STANDATA is to allow the use of such products specifically designed for commercial greenhouse facilities occupied only by greenhouse staff, where members of the public are not permitted access.

CODE REFERENCES

Article 3.1.6.5. states:

3.1.6.5. Flame Resistance

1) Every tent and *air-supported structure* and all tarpaulins and decorative materials used in connection with these structures shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films."

VARIANCE

Polyethylene film, single or double skin, that does not conform to the requirements of CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films," may be used to enclose commercial greenhouse facilities which are required to be either of noncombustible construction or combustible construction, provided:

1. The greenhouse is used only for the growing of plants, (flowers, vegetables, shrubs, trees, etc.),
2. Members of the public do not have access to the greenhouse, and
3. The polyethylene film has a flame spread rating not exceeding 25.

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2006.

For greenhouses used for other purposes, including facilities which include a sales area to serve customers, the enclosing materials used shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films," as per Article 3.1.6.5.

This VARIANCE applies throughout the Province of Alberta.