

1323.1300 SECTION 13, OTHER BUILDINGS.

ASHRAE Standard 90.1, is amended by adding a section to read:

Section 13. Other buildings.

13.1 Greenhouse structures. Greenhouse structures that require heating for cold weather protection are regulated by this section. A greenhouse structure is a structure that is used for plant growth.

13.1.1 Envelope requirements for greenhouse structures.

13.1.1.1 Foundation walls; slab-on-grade floors. Foundation walls and slab-on-grade floors must comply with the requirements of ASHRAE Standard 90.1, Section 5.

13.1.1.2 Transparent and translucent components. Transparent and translucent components are exempt from the requirements of Section 5 provided that they are either single-pane glass, twin wall polycarbonate, two-ply polyethylene or equivalent.

13.1.1.3 Coverings. Greenhouse structures must have either an exterior anti-infrared covering or internal thermal blanket that reduces nighttime radiation in compliance with this section.

13.1.1.3.1 Anti-infrared covering. The anti-infrared covering must be not less than 4-mil thick polyethylene greenhouse covering film that retards nighttime heat radiation from greenhouse structures and has a minimum energy saving rating of 20 percent.

13.1.1.3.2 Thermal blanket. The thermal blanket must be not less than 4-mil thick internally installed material used in greenhouse structures that provides both plant shading and retards nighttime radiation in greenhouse structures and has a minimum energy saving rating of 20 percent.

13.1.1.3.3 Energy saving rating. The energy saving rating shall be determined by comparing the heating energy required by similar greenhouse structures having similar plant contents; either adjusted for weather or co-located during the same heating season. A greenhouse structure covered with an anti-infrared polyethylene covering is compared to a similar structure covered with a polyethylene covering not having anti-infrared characteristics. A greenhouse structure having an internally installed thermal blanket material is compared to a similar structure not having a thermal blanket installed.

13.1.2 Heating requirements for greenhouse structures. Mechanical components of greenhouse structures must comply with the ASHRAE Standard

90.1, Section 6. In addition, unit heating systems must be power vented or direct vented.

13.1.3 Additional requirements for greenhouse structures. Greenhouse structures must comply with the requirements of ASHRAE Standard 90.1, Sections 7, 8, 9, and 10.

13.2 Inflated structures. Inflated structures that require heating for cold weather protection are regulated by this section. An inflated structure is a structure that is air supported.

13.2.1 Envelope requirements for inflated structures. Foundation walls and slab-on-grade floors must meet the requirements of ASHRAE Standard 90.1, Section 5.

13.2.1.1 Minimum insulation. The structure membrane must have a minimum insulation value of R-12.

Exception: Inflated structures that are designed to deflate during the summer months.

13.2.2 Requirements for inflated structures. Inflated structures must comply with the requirements of ASHRAE Standard 90.1, Section 6. Air pressure controls for inflated structures must have the capability for manual and automated control with respect to outdoor wind speed.

13.2.3 Additional requirements for inflated structures. Inflated structures must comply with the requirements of ASHRAE Standard 90.1, Sections 7, 8, 9, and 10.

Statutory Authority: *MS s 326B.02; 326B.101; 326B.106; 326B.13*

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