
FIRE PREVENTION AND BUILDING SAFETY COMMISSION
Department of Homeland Security

Written Interpretation of the State Building Commissioner

Interpretation #: CEB-2021-11-2014 IBC-1809.5

Building or Fire Safety Law Interpreted

[675 IAC 13-2.6](#) 2014 Indiana Building Code (IBC) Section 1809.5 Frost protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line of the locality;
2. Constructing in accordance with ASCE 32; or
3. Erecting on solid rock.

Exception: Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Assigned to *Risk Category I*, in accordance with Section 1604.5;
2. Area of 600 square feet (56 m²) or less for light-frame construction or 400 square feet (37 m²) or less for other than light-frame construction; and
3. Eave height of 10 feet (3048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

Issue

Whether Section 1809.5 of the 2014 IBC requires foundation frost protection to be always achieved through foundation and permanent support systems that extend below the frost line of the project's locality.

Interpretation of the State Building Commissioner

Section 1809.5 of the 2014 IBC does not require foundation frost protection to be always achieved through foundation and permanent support systems that extend below the frost line of the project's locality.

Rationale

Section 1809.5 of the 2014 IBC permits a choice from among three different methods of achieving frost protection in foundation and support systems for structures. Any one of the three stated methods – extending foundation material below local frost line; construction in compliance with the ASCE 32-01 standard for Design and Construction of Frost Protected Shallow Foundations; or construction bearing directly on solid rock – is permissible. It should be noted, however, that in no case are shallow foundations allowed to bear on frozen soil unless the frozen soil condition is permanent at the project's locale.

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