

## APPLICATION OF THE ALBERTA BUILDING CODE FOR STRUCTURAL INSULATED PANELS

### PURPOSE

This STANDATA interprets the Alberta Building Code 2014 (ABC 2014) respecting the use of Structural Insulated Panels (SIPs) in single family, duplex and row house construction.

### DISCUSSION

SIPs are generally considered to be foam and OSB composite panels without vertical framing members. The ABC 2014 requires that vertical structural members be provided for the walls of a building. Currently SIPs are not a referenced product or system in the ABC 2014, which historically has created obstacles to the use of SIPs other than by interpretation or variance by the local authority having jurisdiction. This interpretation is intended to provide the authority for the use of SIPs anywhere in Alberta by applying a consistent set of criteria to achieve an acceptable degree of safety for the building occupants.

Persons responsible for ensuring that a material, product, system or service meets the objectives of the ABC 2014 have several means available to assist them. These means vary from on-site inspection to the use of certification services provided by accredited third party organizations. For new and innovative building materials, where no recognized standard exists for measuring performance, the Canadian Construction Materials Centre (CCMC) provides a national evaluation service for new and innovative materials, products, systems and services that is recognized by provincial and territorial building regulatory bodies. CCMC evaluations provide confirmation that the product, material, system or service complies with the National Building Code of Canada (NBCC).

Under Division A, Sentence 1.2.2.1.(2) of the ABC 2014, evaluation reports issued by CCMC, which is a division of the National Research Council of Canada (NRC), or an organization approved by the Provincial Building Administrator may be used in determining compliance with the requirements of the ABC 2014.

Division A, Article 1.2.1.1. states that compliance with the ABC 2014 can be achieved by complying with the applicable acceptable solutions of Division B, or by using alternative solutions as stipulated in Part 2 of Division C of the ABC 2014.

CCMC evaluations that determine compliance to the NBCC are recognized as equivalent compliance to the ABC 2014 and as applicable, to previous ABC editions. As a result, CCMC evaluations recognized by the Provincial Building Administrator do not require a variance issued by a safety codes officer or Administrator under the *Safety Codes Act* to be used or sold in Alberta.

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by  
the Building Administrator

[Original Signed]  
Paul Chang

Alberta  
Government



## CODE REFERENCES

Division A, Article 1.2.1.1. states:

### 1.2.1.1. Compliance with this Code

- 1) Compliance with this Code shall be achieved by
  - a) complying with the applicable acceptable solutions in Division B (see Appendix A), or
  - b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions (see Appendix A).
- 2) For the purposes of compliance with this Code as required in Clause 1.2.1.1.(1)(b), the objectives and functional statements attributed to the acceptable solutions in Division B shall be the objectives and functional statements referred to in Subsection 1.1.2. of Division B.

Division A, Sentence 1.2.2.1.(2) states:

### 1.2.2.1. Characteristics of Materials, Appliances, Systems and Equipment

- 2) Evaluation reports issued by the Canadian Construction Materials Centre, National Research Council of Canada, or an organization approved by the Chief Building Administrator may be used in determining compliance with the requirements of this Code.

Division C, Sentence 2.2.10.9.(4) states:

### 2.2.10.9. Responsibility for Compliance

- 4) Every vendor or supplier of materials and items used in the construction of a *building* shall ensure that the materials and equipment they advertise, display, sell, lease or otherwise dispose of meet the requirements of this Code.

## APPLICATION

Structural Insulated Panels (SIPs) for walls and roof construction in single family, duplex and row house buildings.

## INTERPRETATION

CCMC evaluations that state materials, products and systems for SIPs are in compliance with the NBCC are recognized in Alberta as meeting the requirements of the ABC 2014 and do not require a variance or alternative solution. Any other alternative means for compliance that does not rely on the CCMC evaluation process including engineering/architecture design would require a variance to be allowed for use in Alberta.

As part of this interpretation, provision of a CCMC evaluation report for the SIPs to the authority having jurisdiction is required to demonstrate compliance.

This INTERPRETATION is applicable throughout the province of Alberta.

