



International Beams Inc.  
418 rue St. Dizier  
Montreal, Quebec H2Y 3P8

Phone: (866) 457-4043

## Technical Bulletin (TB-IJ-6)

**Subject: Fire Considerations for Residential Wood I-Joist Floors**

August 2010

This technical bulletin is intended for use with International Beams Inc. products and offers general guidelines for topics that may not be covered in our literature. Appropriateness of details for a specific project should be evaluated by a qualified designer. This technical bulletin may be periodically updated. Check [internationalbeams.com](http://internationalbeams.com) to ensure that you have the most recent version.

Typically, residential building codes do not require one-and-two family dwellings to be fire-rated<sup>1</sup>. However, there are several recent building code developments which are intended to increase the fire resistance of houses or provide early warning to occupants.

### **Smoke Detectors**

2009 International Building Code (IBC), section 907.2.11  
2009 International Residential Code (IRC), section R314.2  
2005 National Building Code of Canada (NBC), sections 3.2.4.20 and 3.10.19

### **Sprinklers**

2009 International Building Code (IBC), section 903.2.8  
2009 International Residential Code (IRC), section R313.1

### **Membrane Protection**

2012 International Residential Code (IRC), section R501.3  
Although this section was approved in May 2010 by the International Code Council (ICC), the 2012 edition of IRC has not yet been published. The new requirements of this section, including additional background and discussion, can be found in an American Plywood Association (APA) technical topic TT-015  
([http://apawood.org/pdfs/download\\_pdf.cfm?PDFFilename=managed/TT-015.pdf](http://apawood.org/pdfs/download_pdf.cfm?PDFFilename=managed/TT-015.pdf)).

These building code sections apply to other residential floor assemblies in addition to wood I-joists: including floor trusses, light-gauge steel framing, and dimensional sawn or structural composite lumber. Not all local jurisdictions have adopted the building code editions indicated above. There may also be local jurisdictions that have chosen to adopt special provisions even though the edition of the referenced building code has not yet been adopted. Consult your local building department if you have questions about which building code edition and provisions are currently being used in your area.

<sup>1</sup> Exceptions: townhouses, which may require fire-rated walls between units, and over/under construction where floors may be required to be fire-rated between floor levels for different occupants. These are not one-and-two family dwellings, but are building types that are included in the residential building codes.