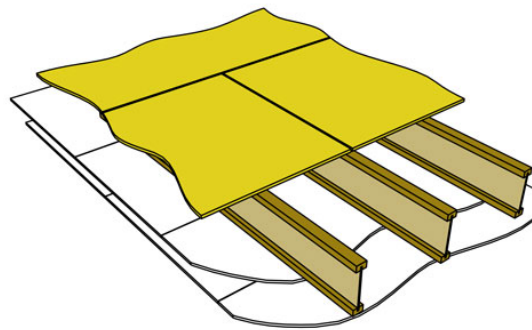


Technical Tip

AdvanTech® Flooring in Fire Rated Assemblies

In certain applications, building codes require a fire resistant rating to contain fire in a particular area or room of a building for a specified length of time. The fire resistant rating can be defined as the time in hours (or minutes) that a material or assembly of materials will withstand the passage of fire. Conversely, the Flame Spread Rating is a measure of the speed it takes flame to spread on the surface of material. The flame spread rating for AdvanTech is Class III (C).

For wood frame construction, fire resistance ratings are often achieved through an assembly of materials rather than a single element. As an example, to achieve a one-hour rating for a floor system, an assembly consisting of 23/32" AdvanTech flooring, 9-1/4" I-Joists, and 2 layers of 1/2" Type X gypsum wallboard ceiling could be used as shown below (Complete assembly details can be found in the *UL Handbook*).



Code recognized assemblies for wood frame construction can be obtained from the *UL Fire Resistance Directory* published by Underwriters Laboratories (<http://www.ul.com/>) and *Design for Code Acceptance – Fire Rated Wood Floor and Wall Assemblies* published by the American Wood Council (<http://www.awc.org/>).

The UL Directory previously recognized only plywood as a suitable panel for fire rated wood framed assemblies. In the year 2000, the language of the directory was changed to indicate suitable panels as wood structural panels meeting the requirements of the U.S. Department of Commerce Voluntary Standard PS 1, *Construction and Industrial Plywood* or the U.S. Department of Commerce Voluntary Product Standard PS 2 *Performance Standard for Wood-Based Structural-Use Panels*. Based on this definition, wood structural panels include plywood as well as engineered strand panels (OSB). Since AdvanTech is manufactured in accordance to U.S. Department of Commerce Voluntary Product Standard PS 2, they meet the definition of wood structural panel as outlined in the UL Fire Resistance Directory.

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