

## FLAME SPREAD PERFORMANCE OF COMPOSITE WOOD PANELS AND FINISHES

Unless otherwise stated, Arauco North America particleboard or MDF in industrial or laminated<sup>1</sup> forms are not certified for a specific flame spread rating.

Untreated<sup>2</sup> particleboard and MDF have been tested for flame spread by a number of different manufacturers and the results met the **Class III or C** rating. The Department of Housing and Urban Development (HUD) in their Manufactured Home Construction and Safety Standards (Section 3280.203) accepts particleboard 3/8 inch and thicker as having a flame spread rating of 76 to 200 for general use in mobile homes.

The American Wood Council (AWC) of the American Forest and Paper Association (AF&PA) has published information in their "Design for Code Acceptance" series (DCA1) relating to Flame Spread Performance of Wood Products. The document can be found at [www.awc.org](http://www.awc.org). Table 1 in that document places particleboard and MDF in the Class III or C rating. Likewise, Table 2 in that document places factory finished products (i.e. printed or with overlays) containing untreated particleboard and MDF substrates in the Class III or C flame spread rating.

Smoke data specific to every product is currently not available; however other manufacturers have found typical values of 100-200 for smoke developed. The AF&PA document states that "a smoke developed index was measured for some of the wood products listed in Tables 1 and 2". None of the products tested exceeded 450, a limiting value commonly used in building code regulations.

Arauco North America particleboard treated with fire-retardant<sup>3</sup> (FR) additives are certified by Intertek Testing Services NA, Inc. to have a **Class A or Class 1** flame spread rating<sup>4</sup>. In addition, TFL (melamine) applied to Arauco North America's fire-rated particleboard substrate at our Albany, OR laminating facility is classified by Intertek Testing Services NA, Inc. to have a **Class A or Class 1** flame spread rating<sup>4</sup>.

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1 TFL (thermally fused laminate), decorative paper overlay, wet coated; i.e., Rezcote-paint or direct print

2 Without a fire-retardant additive

3 Trade names: Duraf Flake® FR, Premier FR®, VESTA FR Particleboard, VESTA FR MDF

4 ASTM E-84 Test for Surface Burning Characteristics of Building Materials and CAN/ULC – S102 Test for Surface Burning Characteristics of Building Materials and ASTM E2768 Extended ASTM E84 Standard Test Method for Extended Duration Surface Burning

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