

RE: Fire Ratings for Evoke Laminate Flooring

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Thank you for your inquiry regarding fire ratings for the Metropolitan Evoke Laminate Floors.

Generally a product does not carry a fire rating itself unless it's been treated to reach a certain performance level and then tested specifically against that performance standard. We have not provided additional treatments to our floors specifically to retard flame/smoke/fire spread.

We understand that architectural specifications usually require rating an entire assembly--the structure itself--a rating which we are told is created by looking at the entire architectural condition. It is often a function of combining the product's condition (thickness, species, finish, construction, etc.) with the subfloor's (or sub wall) condition. While there are common conditions, the ratings and factors used to calculate them will sometimes vary based on specific state or even local building codes. Most building codes provide certain default numbers to be used for different flooring products and unless the product is designed and referenced to specifically perform above the standard, a rating is usually not required. We found this post to be a useful layman's explanation of product and building types: <https://surviving-wildfire.extension.org/fire-ratings-for-construction-materials/>.

In general, studies show that laminate flooring is usually in the moderate category of burn rates and is considered "mildly" or "moderately combustible" depending on the report.

- A study <http://www.isca.in/rjrs/archive/v3/i10/9.ISCA-RJRS-2013-936.pdf> provides laminate flooring's flame spread rate of 137 mm/min and provides a class of fire reaction according STN EN 13501- as "E fl – moderately combustible." (See Table 1 on p3.)
- The AWC lists MDF (which is the base core for laminate flooring) generally as a "C" in this report: <https://awc.org/wp-content/uploads/2021/12/AWC-DCA1-FlameSpreadPerformance-1906.pdf>. (See Table 6 on p6.)
- This Canadian Wood Council report states that low density fiberboard (and laminate is high density fiberboard) with a paper coating <https://cwc.ca/wp-content/uploads/2020/09/Fact-Sheets-Surface-Flammability-and-Flame-spread-Ratings.pdf> to have a flame spread of 150 and a smoke rating of 100. (See Table 1 on p3.)
- And a study comparing seven flooring materials concluded that *"Linoleum and Laminate floorings, especially due to low flammability are recommended, too."* <http://www.isca.in/rjrs/archive/v3/i10/9.ISCA-RJRS-2013-936.pdf>

If you are interested in reviewing information regarding achieving fire rating standards when designing with wood products, we recommend the material provided here: <http://awc.org/codes-standards/fire>. It is a rich resource for both species specific data and information on designing complete systems.

Additional resources on wood design may be found at <http://www.apawood.org/fire-rated-systems> and https://www.fpl.fs.usda.gov/documnts/fplgtr/fplgtr282/chapter_18_fpl_gtr282.pdf while Canadian builders may also wish to review building code requirements and testing types here: <https://www.floorcoveringreferencemanual.com/a08a---flammability-issues.html>.

We are asked frequently if our finish has a fire rating. While a laminate floor does have a top layer of harden chemical finish as the first wear layer, it is not a “finish” in the traditional sense as people commonly envision them. Although we use products that we believe contribute towards reduced flame spread, we cannot make any specific finish-rated claim. A fire rating is done on the full product, not just the finish.

We are also often requested to recommend a site finish that can be applied during or after installation. Unfortunately, we do not have a specific on-site treatment that we recommend. It is possible that any additional spray or treatment could change the color of the floor or impact the finish or cause some other reaction may also invalidate our warranty. Any failures as a result of the use of topically added products are not covered under our warranty.

If you require a product specific rating, there are a variety of testing services, including, but not limited to:

<https://www.capitaltesting.org/fire-laboratory-testing-services>

<https://www.intertek.com/building/fire-testing>

<https://www.professionaltesting.us/our-test-lists/flammability-test-list>

<https://nrc.canada.ca/en/research-development/nrc-facilities/fire-safety-testing-facility>

We recommend you use the default rating outlined in your specific building code for your product, as we make no specific warranty beyond that default, but if you would like to arrange for testing, we are pleased to help.

Thank you.