



RE: Fire Ratings Evoke Rigid Core Flooring

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Thank you for your inquiry regarding fire ratings for Metropolitan's Rigid Core Vinyl Flooring. Rigid core is a generic term encompassing a variety of cores including SPC and WPC variations.

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 however, rigid core floors are usually considered to be good performers in this area as they are primarily made of calcium carbonate and polyvinyl chloride. The calcium carbonate is a generally inert, non-flammable substance and the PVC is usually considered a fire inhibitor. Please see <https://www.vinylinfo.org/news/learn-about-the-fire-properties-of-pvc> for more information regarding the application of fire codes and ratings to vinyl flooring.

Vinyl is the "go-to" substance for products such as electrical cord coatings because of its extremely high fire ratings and generally low toxicity. The book Characterization and Toxicity of Smoke edited by Harry K. Hasegawa provides more information on general industry conditions. While it cannot be viewed as an endorsement of any specific product, the study notes that generally the "toxic potency of the smoke from most PVC products is similar to that of most ordinary products in use in society."

We are 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.

Finally, 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 (construction, thickness, finish, 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 explanation of product types: <https://surviving-wildfire.extension.org/fire-ratings-for-construction-materials/>



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://professionaltesting.us/our-services/flammability-testing>

<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.