



Navigating Flammability Testing

When testing upholstery fabrics, the first question that typically comes up is which foam should you have the lab test your fabric over? Often you are given two choices: a non-fire retardant (FR) foam and some variety of FR foam. While the most tempting choice may be the FR foam, let's look at why it may not be the right choice.

The standard states that the material is to be tested in the configuration that it will ultimately be used. But often when testing the fabric, technicians don't know the full picture of how it will be used - the material is being developed and it has not been sold yet. Which foam the furniture manufacturer will use is unknown at the time of testing.

Let's look at what the results will tell us. If tested over a non-FR foam, the ability of the material to provide ignition resistance is being determined. According to the FTP standard, while this does not eliminate the need to test the actual combination, it can help in the short-listing of material combinations and to reduce the overall amount of testing required. Specifically, testing over a non-FR flexible polyester foam with a density of approximately 22 kg/m^3 is recommended. In this scenario, the fabric must act as a deterrent to the ignition source, not allowing it to ignite the foam underneath the fabric.

WHAT'S NEW

TOUR OUR LAB



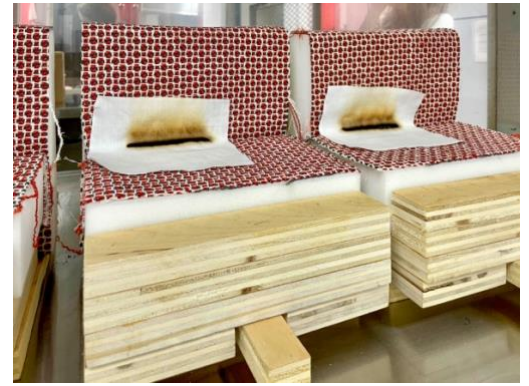
CONTACT US

616.369.0522
info@flooralytics.com

Unique Tests for Dynamic Applications

The alternate option is to test over a flame retardant foam, such as a CMHR (combustion modified, high resiliency) foam. This will allow you to assess only the fabric's resistance to the ignition sources. The foam itself is ignition resistant, so the fabric does not need to act as a barrier like it does when testing over non-FR foam. The main drawback though is that your fabric is then only approved over that specific foam. If the end user decides on another type of foam (such as one with less ignition resistance), retesting must occur, which may lead to the need for additional flame retardant treatments.

Ultimately, the decision of whether or not to test over an FR foam should be based on how you want to market your material and the expectations of your end user. Once you determine this, the decision as to how to test your material becomes much clearer. If you still need help deciding, give our team a call and we'll help you decide on how to test.



Did You Know?

The SOLAS Convention, which ultimately led to the creation of the Fire Test Procedure (FTP) requirements for fabrics, was a direct result of the 1912 Titanic disaster. According to IMO, it was adopted in 1914, taking into account the lessons learned from the disaster.



Flooralytics is Here to Help

Knowing how your products will perform when they are subjected to flames is a responsible safety practice and critical practice in building consumer trust. Flooralytics will help answer those questions. Our team of lab technicians uphold flammability testing to meet the dynamic needs of our customers, allowing us to become a full-service provider of fire safety testing for customers across the country. Our dedicated team of professionals will guide you through the flammability testing process, answer any questions you may have and help you better understand the complexities of fire safety in the textile industry.