

We are often asked why we choose to UL label our Korographics® Digital Wallcoverings (the "wallcoverings"). What is the difference between an independent lab's testing results and UL labeling? What is Underwriters Laboratory Classified Follow Up Service?

Underwriters Laboratory is an independent, non-profit organization dedicated to the determination of product performance in relation to safety standards. Their UL label is recognized on products as a measure of safety and assurance for the customer. Therefore, it was a natural marriage for the UL label to be on every roll of the wallcoverings.

UL CLASSIFIED FOLLOW UP SERVICE

Initial Manufacturing of Wallcoverings:

The UL inspector follows an initial production run, observing the formulation, fabric, construction, and manufacturing procedure. Samples of the components are collected and tagged by the inspector.

Application to Substrate for Flammability Testing:

The wallcovering is applied to panels of the substrate with the specified wallcovering adhesive at the coverage rate indicated. The UL inspector follows the weighing and application of adhesive to determine if the application rate conforms to specification.

Flammability Testing at UL'S Northbrook, Ill. Testing Site:

The engineering group at UL prepares wall-covering panels and places them in a conditioning room for the specified period. They then perform Flammability testing. Two different tests are used to evaluate the flammability of Korographics® Digital Wallcoverings.

• Steiner Tunnel Test-UL-723:

This test, which is the most recognized test for measuring the flammability of interior finish materials, also has the designations ASTM E84, CAN S102M, NFPA-255, and UBC 8-1. In this test, the wallcovering is applied to inorganic reinforced cement board with the specified adhesive. The panels are then installed on the ceiling of the Steiner Tunnel, a horizontal chamber that is 25 feet long. The test is done by exposing the tunnel to a gas ignition burner at one end of the tunnel. After the wall covering has been exposed to the flame for the specified time period, the Flame Spread and Smoke Development numbers are calculated and reported. In wallcovering, we are typically looking for a Class "A" rating which requires that the Flame Spread be 25 feet or less.

• Corner Burn Test-NFPA 286:

This test was developed in response to activities associated with the regulation of interior finishes in NFPA 101® *Life Safety Code*®. In this test, the wallcovering is applied to gypsum board with specified adhesive. The panels are then installed on three walls of an 8 foot by 12 foot test room. The test is done by exposing the one corner to a gas ignition burner at several different energy levels for specified time periods. Various results, such as smoke released, flame spread, and flashover are evaluated during this test. In this case, if the wall covering meets the criteria specified in Section 10.2.3.5.3 of NFPA 101® *Life Safety Code*®, it is acceptable.

Product File Established:

A file is established with a copy at UL and a copy at the manufacturing site. This file contains construction, fabrics, weight of film, thickness of film, an infrared spectrograph of the film, and a detailed description of the manufacturing process. This file describes completely the product that was tested.

Quarterly UL Audit Inspection:

There is an unannounced quarterly inspection made at each of the manufacturing or labeling locations. The inspector reviews the control records since the last inspection, selects the products to be audited, determines compliance with film formulation specifications, determines the film weight and thickness, and checks to see that proper fabric backings are being used. On occasion, film samples are taken for infrared testing at UL, Northbrook. Failure to conform will result in disallowing use of the UL label.

Changes in Material & File:

If any change is planned in the product originally tested, a request must be presented to the engineering staff of the UL Fire Technology Section. If it is a minor change which would not affect the flame or smoke characteristics, they will allow the change without retesting. If they feel that the change could impact either characteristic, then retesting is required.

UL Canada:

U.S. and Canadian UL groups have reciprocity agreements. The testing by one organization will satisfy both country's labeling requirements.

UL Labeled:

Each roll of Korographics® Digital Wallcoverings has the UL label applied.

Clearly, there is a significant difference between a manufacturer utilizing a lab result on a sample they chose to submit, compared to the totally independent classification and follow up auditing service of the Underwriters Laboratory. Korographics® Digital Wallcoverings takes pride in this program and in the benefit it brings to our customers.