

Considerations for Fabric Selection

All Novawall[®] extrusions can utilize a wide range of contract fabrics, but some fabrics are better suited to certain extrusions. Other issues with fabric have to do with yarn content (some yarns are more susceptible to sagging with changes in temperature or humidity), acoustical transparency, the correct fire testing, and the use of a lining material to eliminate optical transparency. Fabrics that are designed for specific applications, (a fabric manufactured for one purpose such as drapery or upholstery) may not be adaptable in a stretched fabric system.

Novawall[®] maintains a comprehensive database of contract fabrics (in house use only) that have been installed or evaluated with Novawall[®]. If you have questions or concerns with a specific fabric, please use the attached Novawall[®] Fabric Evaluation Form (page 3 of 3) and fax or email the information to sales@novawall.com.

As there are often new fabrics or if you choose a fabric that is not in our database, we'll be glad to obtain a sample and test the fabric for your project.

Fabric Selection Guidelines

The following items should be considered when selecting a fabric for a Novawall[®] application.

1. **Fire Rating** - All fabrics should be certified by the manufacturer as meeting Class A fire rating when tested in accordance with **ASTM-E84 unadhered**. In some cases more stringent local codes may supersede this requirement. Fabrics that have been tested for NFPA-701 (Drapery), Cal 117 (Upholstery) or fabrics that have a FR treatment added will not be in compliance with fire codes for stretch fabric installations.

2. **Acoustical Performance** – At this time no standardized test exists for measuring the acoustical transparency of a fabric. Some manufacturers test fabric under ASTM 423 which can be used as an indicator of transparency, but does not take into account how sound hits the fabric from an angle. Generally fabrics are not tested for acoustical transmission capability. Fabrics that are chosen for an acoustically sensitive application (recording or mastering studios, home theaters, film scoring stages, performance venues video broadcast spaces and post production facilities) should be loosely woven, unbacked and air should pass through the fabric freely with no impedance. These are usually 100% polyester and there are many panel fabrics available for these types of applications.

Many other fabrics have acceptable acoustical characteristics for conference room, audio-visual center and similar applications where acoustical performance is needed but the frequency response of the space is not critical. Fabrics that have been treated with anything heavier than a 0.5 oz sprayed acrylic backing will be less effective in an acoustical application.

3. Yarn Content – Stretched fabric panel systems are unique in that improperly selected fabrics may exhibit sagging when indoor temperature or humidity varies significantly. If a room will be subject to unconditioned outside air either directly through windows or indirectly via the ventilation system, the risk of sagging is greater. Also in geographical areas where high humidity is experienced during certain times of the year or when building ventilation systems are turned off periodically, risk of sagging is greater.

Yarn construction (the way in which the fabric is spun or woven) is extremely important in determining the risk of sagging. The following guidelines will assist you in selecting fabrics with lower risk of sagging:

Fabrics that are 100% or a high percentage of polyester are almost immune to sagging. Experience has shown that fabrics with at least 60% polyester are good performers as long as the remainder of the fabric content is not rayon or nylon.

Polyolefin and many natural fabrics, i.e. silk, wool, cotton, are generally good performers unless subjected to wide variations in temperature or humidity. These fabrics will normally require treatment with acrylic backing to stabilize the yarns and minimize sagging.

Fabrics that contain more than 20% nylon, rayon or viscose should be avoided.

4. Fabric Weight - Novawall[®] is designed to be compatible with most **panel** fabrics that weigh 12 ounces or more per linear yard. Some of the recycled fabrics weigh less than 12 ounces per yard and may require a backing. Novawall[®] can also be used with many upholstery weight fabrics. In some cases the heavier fabrics may be only useable with certain Novawall[®] extrusions.

5. Patterns/Repeats - The unique design of the Novawall[®] extrusions allows the precise matching of repeats and designs at vertical, horizontal and diagonal seams. Therefore the designer is not limited to monolithic fabrics. Some hand woven patterned fabrics have inconsistent repeats that preclude accurate pattern matching at seams.

6. Transparent Fabrics - Many lightweight fabrics may be somewhat optically transparent particularly in lighter colors and under certain lighting conditions. To insure that the fabric will not have transparency issues, the fabric can be evaluated by using a light box or under the lighting that will be used in the completed project. If large printed characters or a geometric shape can be seen under the fabric when illuminated, the fabric must be specified with a lining or scrim layer under the facing fabric.

7. Digital Printing - There are many fabrics that can be printed on digitally. Please contact your local Novawall[®] representative to work on details for this type of project. Panel layout is very important especially in the case of a mural, where the seaming will have to be planned to ensure proper alignment in the installation.

Novawall[®] Fabric Evaluation Form

Please provide the information requested below and fax it to 703-461-0436
Or email the information to sales@novawall.com (please print neatly)

Fabric Manufacturer: _____

Fabric Style and Color: _____

Novawall[®] System Specified: _____

Type of Core Material: _____

Your Name: _____

Company: _____

Telephone #: _____ Fax #: _____

Email Address:

Project Name:

Project Location:
