



RPG ABSORBOR PANEL – ACCEPTABLE FABRICS FACT SHEET

24-MAR-09

Application Method

RPG fabric finishes are stretch applied over face of core then bonded to edges and returned and bonded a minimum of 1" (25 mm) onto back side of panel to minimize telegraphing of core irregularities.

Acceptability Issues

DIMENSIONAL STABILITY (ASTM D6207-03): This test method covers the determination of the dimensional stability of fabrics that are intended for use on panel and screen systems to cycled changes in humidity and temperature. Polyester, modacrylic, olefin, polyolefin, polypropylene, and blends using these fabrics as a base material are the most stable. Although any choice of fabric should be tested for dimensional stability, fabrics containing nylon, rayon, and silk are less likely to remain stable. An acrylic or latex backing will not stabilize an otherwise dimensionally unstable fabric.

ACOUSTICAL TRANSPARENCY: The ability of sound to pass through the fabric and enter the sound absorptive panel core. If air passes easily through the fabric, it will have good acoustical transparency. Typically acceptable fabrics will have an open weave. An example of an acceptable panel fabric is Guilford FR701. Fabrics with a backing will generally have a poor acoustical transparency and micro-perforation is often not a solution, since the holes may close over time.

TELEGRAPHING: This refers to surface irregularities of the core or surface template telegraphing through the fabric. RPG stretch applies all fabrics to minimize this effect, but each custom fabric must be tested. Also certain light colored fabrics will reveal the surface and in these situations, RPG applies an acoustically transparent scrim on the core, prior to fabric application. A list of light colored fabrics in the Guilford FR701-2100 panel fabric line include: 130, 380, 394, 403, 404, 460, 481, 538, 748, 758.

ADHESIVE COMPATIBILITY: This refers to the ability of the adhesive RPG uses to bond to the fabric and not bleed through and discolor the fabric.

MISCELLANEOUS: Certain fabrics exhibit visible lines when stretch applied over the panel face due to different light reflectivity in the areas under different tensions. Also certain humidity conditions humidity changes from 80% to 60% may cause fire retardant salts to precipitate and leave a white power mark.

PROCEDURE FOR CUSTOM FABRICS: There are many fabric manufacturers and thousands of fabric choices available. Unfortunately not all fabrics are suitable. All custom fabrics specified, must be tested by RPG to determine if there are any potential problems that may require the designer to consider a different fabric. At the order quotation stage, RPG requires one linear yard of specified fabric shipped to RPG for evaluation. RPG cannot guarantee selected fabrics will remain bubble-free or sag-free if testing reveals a specified fabric is unsuitable for application to our products.

Note: We cannot accept responsibility for products that are not used, or installed, to our specifications. Only handle panels wearing clean, white gloves during installation.

Diffusor systems to enhance the acoustics of critical listening and performing environments