

Sound Absorption with Drapery



Summary Points

Sound is a very important consideration for theatrical performances, concerts and other events.

While some events will need to have loud sound, others will need sound dampening. For those who need the very utmost in sound absorbency, there is no substitute for professional acoustic material installed by a specialist. If you need lighter sound dampening, curtains and draperies can be valuable and cost effective tools.

Acoustic curtains are generally made of heavy duty, flame retardant fabrics, specially designed and constructed to absorb sound. They can be used with various track systems to afford greater flexibility than fixed sound absorptive panels.

Typically used for recording studios, sound sets, dance, drama and music rehearsal spaces, acoustic curtains can be used in venues ranging from schools to theatres.

Acoustic curtains are primarily intended for sound absorptive applications, as they offer minimal sound transmission loss. But acoustic curtains have a wide variety of applications apart from absorbing sound. They can be used to cover window areas, to divide spaces, or they can be arranged to cover hard or reflective surfaces, which allows an element of acoustic 'tuning' within a room.

Draperies and curtains can also be used as acoustic room dividers to not only effectively divide large spaces while providing a high degree of sound absorption and attenuation.

"Specialty Theatre use first-hand experience to design theatrical equipment that is practical and reliable, which is why their products have been sold in over 28 countries around the world"

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Specialty Group Pty Ltd
ACN 137 410 434

 **specialty theatre™**

... passion for performance

40 Tennyson Street, Williamstown VIC 3016 AUSTRALIA

TOLLFREE: 1800 832 185 | **FAX TOLLFREE:** 1800 832 285

PHONE: +61 3 9028 0310 | **FAX:** +61 3 9397 3400

EMAIL: info@specialtytheatre.com

WEB: www.specialtytheatre.com

Specialty Theatre White Paper

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Material Weight

One of the most important considerations when using a drapery for sound absorption is the weight of the material. Heavier materials will deaden sound better. For instance, a light muslin curtain will absorb almost no sound at all, but a curtain made from heavy velour or satin will dampen it considerably.

Fullness

Fullness is another important consideration for sound absorption. A piece of fabric with 0% fullness will not absorb that much sound. One with 100% fullness will absorb much more. This is because there is more material to deaden and absorb sound waves. It makes sense if you think about it – a 20-foot drapery with 100% fullness actually has 40 feet of material, whereas the same size piece of material with 0% fullness will only be 20 feet.

Nap Thickness

Nap thickness is another important consideration for sound absorption. The thicker the nap, the more sound can be dampened. However, a fabric with no nap at all (sheer) will not offer much in the way of sound deadening.

Appearance

You'll find that hanging material to absorb sound requires you to consider appearance as well as performance. Obviously, you won't want to hang ugly draperies, because while it might help to dampen sound, it will ruin the aesthetics of your room. Stage curtains can be of immense use here, because in addition to providing theatrical quality sound dampening, they also provide a beautiful theatrical appearance.

Professional Acoustic Materials

Of course, you always have the option of using professional acoustic materials to dampen sound. You'll find these types of materials employed in recording studios around the world, as well as in TV/movie production facilities and in educational institutions where complete sound dampening is required. However, you should be aware that these options carry a hefty price tag with them, and they really need professional installation to achieve the best results. In addition, they are not usually aesthetically pleasing, so you would likely need to install something over the dampening materials to change the appearance.

Custom Theatrical Draperies

Perhaps the best option for those who need sound absorption in concert with a pleasing appearance is a custom theatrical drapery. These can be manufactured to provide excellent aesthetics, as well as sound dampening properties, and they can also be constructed from almost any material (or combination of materials) that you might want for appearance. Make sure that you specify the material type, weight, fullness and other considerations when ordering to ensure you get the right draperies, though.

For further information please contact Specialty Theatre or an authorised Specialty Theatre dealer.

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