GIK Acoustics Evolution PolyFusor

Acoustic Diffuser/Absorber

The GIK Acoustics Evolution PolyFusor is a combination of a polycylindrical diffuser and an absorber merged into a single 600 x 1200 mm unit that's just 155mm deep. Curved diffusers are well established as a means of providing dispersion, which helps avoid flutter echo and ringing within studio and performance spaces. Essentially, such diffusers utilise

>>



a convex vertical surface to 'fan out' reflected sound rather than bouncing it right back in the way a flat surface tends to do. GIK Acoustics fill their diffuser with ECOSE absorption material, which according to web-based research is an eco-friendly and less itchy equivalent of standard mineral wool. The idea is that any low frequencies that pass through the relatively thin curved frontal panel will be at least partially absorbed by the material inside, while anything above 600Hz or so is diffused. As with conventional absorber

"The idea is that any low frequencies that pass through the relatively thin curved frontal panel will be at least partially absorbed by the material inside, while anything above 600Hz or so is diffused."

traps, greater low-frequency absorption can be expected if the PolyFusor is angled across a corner rather than being fixed directly to the wall.

Weighing just 9kg each, the PolyFusors are easy to mount on a wall and are available in nine standard Camira Cara fabric options, with additional options to order. Construction is based on a rigid base frame to hold the curved front plate and the thin MDF back board. The curved surface is covered in a suitably thin fabric with MDF end caps fitted to provide a tidy finish. Cosmetically, then, the PolyFusor's look very smart yet fairly unobtrusive, making them a good choice for home theatre and music listening rooms as well as studios, though their sensible pricing makes them especially attractive to home-studio operators.

Diffusers of this type are used in areas where mid and high frequencies need to be scattered rather than absorbed, and they're generally best used in conjunction with conventional absorbers

placed elsewhere in the room. Ideally they should also be located two or more metres from the listening position this makes them unsuitable for use in very small rooms. They can be fitted to rear or side walls in both control rooms and studio spaces to help even out the mid/high energy distribution, and while they may not be effective enough at the low end to mitigate the need for further bass trapping, they do help control the lower mid-range. The acoustic principles on which PolyFusors are based are well established and the panels perform well within their remit, but how many you need and where best to place them will vary from room to room. As long as your room is upwards of three metres long, PolyFusors would work well on the rear wall to break up hard reflections, along with foam or mineral wool absorbers at the mirror points to control early reflections. Paul White

£ £228 per pair including VAT.
W www.gikacoustics.co.uk