noise control

ENGINEERING DATA SHEET

Fulltrap

The FullTrap™ is a combination broadband absorber and bass trap that is mounted on a wall surface to control excessive bass in a room. This is achieved by combining three acoustical principles into a single device.

To handle mid-range and upper frequencies, a 3" thick front absorptive panel made from 6 lbs. per cubic foot high-density encapsulated glass wool is employed. Behind the acoustic panel is a diaphragmatic densemass membrane that acts as a low frequency resonator to absorb bass below 75Hz. Behind the membrane is an air cavity that is created by the wood composite enclosure which serves to further attenuate bass in the troublesome 100Hz region.

The FullTrap enclosure is made from MDF wood composite with a black, easy to clean melamine finish and ships flat to reduce freight costs. Final assembly is performed on site using a simple household screwdriver. Building a FullTrap takes about 15 minutes from start to finish! The FullTrap is available in a choice of three panel colors: black, beige and grey.

SPECIFICATIONS:

ORDER NUMBER	Z840 1100 to (ac denotes color code 00-Black, 03-Berge, 08-Grey)					
FRAME MATERIAL	Black molamino laminated MDI					
DIMENSIONS	24" (610mm) x 48" (1219mm) x 8" (202mm)					
PANEL MATERIAL	I onned, semi-rigid morganic glass libers, 6.0 pct. (95 kg/m3)					
WEIGHT (ASSEMBLED)	35 7 bs (18 kg)					
FABRIC FACING	Acoustically transparent polyeeter					
DIAPHRAGMATIC MEMBRANE	Loaded vinyl, 1 pcf (16 kg/m3)					
RECYCLED CONTENT	Over 50%					
LEED ELIGIBLE	Yes 🙆					

CORNER MOUNTING ABSORPTION CHARACTERISTICS:

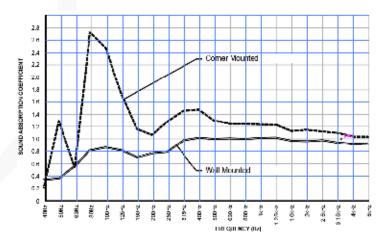
Sound absorption coefficient data

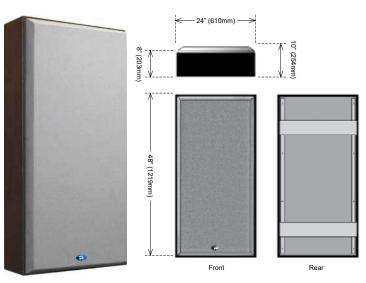
40Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	5kHz
20	57	176	1 27	1.33	1 23	1 19	1 13	1 13

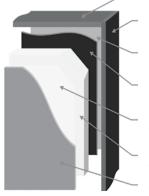
WALL MOUNTING ABSORPTION CHARACTERISTICS:

Sound absorption coefficient data

40Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	5kHz
.37	.59	.83	.80	1.00	1.02	.98	.94	.98







High density wood fiber composite construction provides rigid structure of outer frame.

Black melamine finish provides a tough durable coat that is easy to clean and looks great!

Deep 8" cavity assists in trapping bass and controls lower mid range frequencies and standing waves.

Diaphragmatic membrane vibrates to absorb lower bass frequencies without resonating.

High density glass wool panel absorbs high frequencies and helps eliminate flutter echo.

Resin treated edges work with the micromesh to fully contain glass fibers from escaping.

Acoustically transparent fabric covering presents a professional architecturally attractive look.

Due to the broadband nature of the diaphragmatic limp mass used in both the MaxTrap and FullTrap, the device will naturally vibrate at the room's resonant frequency. This will result in greater effectiveness at the peak frequency, in particular when corner mounted. This is clearly demonstrated in the Corner Placement Test where the resonant frequency in the laboratory is 80Hz. For reference, the standard Sound Absorption Coefficient wall-mount test was also performed. Although limited in scope, it provides typical data down to 100Hz and expected performance at lower frequencies as calculated by the laboratory. It should be noted that bass absorption tests are difficult to produce due to the extremely long wavelengths of lower frequencies and available room size. The tests, as described above, are as a result of our working with Riverbank Laboratories to deliver the most accurate findings possible given the limitations of the facility and practical mounting methods.