

TecSpecs Effective January 2024

HiPer[®] PANEL – FLAT PANEL DIFFUSER

The HiPer® Panel is a patented acoustical panel that combines absorption and diffusion into one product. The device is similar in style to a standard fabric covered wall panel and can be intermixed with them.

Acoustical performance differs significantly from outward appearance. The patented internal structure uses two layers of absorption, separated by a barrier septum, to form a low-profile, composite absorber / diffuser product.





CONSTRUCTION:

Internally the panel substrates have a pattern of holes in two substrate layers, 180 degrees out-of-phase with each other and separated by a thin membrane creating an equal distribution of absorptive and reflective regions - both vertically and horizontally. There will also be additional cancellation at certain frequencies due to wave interference from phase shifting due to the time delay of passing through the various combinations of substrate and membrane and reflecting back through the panel.

Fabric Finish:	Guilford of Maine® FR701®
	or factory approved finish
Edge Design:	Square
Thickness:	1", 2"
	3", 4" (Special Order)
Sizes:	2'x2',2'x4' (Custom up to 4'x10')
Fire Rating:	Class A

Applications:

- Houses of Worship
- Recording & Broadcast Studios
- Educational Facilities
- Home Entertainment Rooms

Sound Absorption Coefficient										
Thickness	Mounting	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC		
1"	Туре А	0.09	0.28	0.78	0.75	0.94	0.85	0.70		
1"	Type E400	0.43	0.28	0.51	0.76	0.99	1.10	0.65		
2"	Туре А	0.23	0.83	0.78	1.01	0.90	0.78	0.90		

*Note: Absorption data for the 3" and 4" HiPer Panels is available upon request.

Random Incidence Sound Scattering								
ISO	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
17497-1	0.00	0.03	0.00	0.05	0.42	0.51		

*Note: Polar Plots available upon request.

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