

Place the **Tuned Absorber/Diffuser** where low and mid-frequency absorption is desired in conjunction with increasing reflectivity and diffusion in higher frequencies. The outstanding acoustical performance of this panel is the result of the assembly of a sound absorptive fibrous core covered with a variable impedance laminate. Openings in the laminate are sized and spaced to optimize the absorption in low to mid frequencies while creating random higher frequency reflective surfaces between openings (variable impedance).

A design program is utilized to acoustically optimize the hole pattern in the laminate while maintaining the desired overall open versus reflective area in the panel surface. For increased low frequency sound absorption, a thicker fibrous core (2" to 4") can be specified. For increased high frequency absorption, the hole size can be changed to 5/8" diameter versus the standard 1/2" opening.



# TAD / TUNED ABSORBER / DIFFUSER PANEL

#### **DESCRIPTION**

- A versatile absorber / diffuser panel wrapped in a wide selection of fabrics or vinyls
- Engineered to control room acoustics
- · Available with hardened shaped edges
- Thicknesses range from 1" to 4" and sizes up to 4' x 10'
- Standard sizes are 2'x2', 2'x4', 4'x4', 4'x6' and 4'x8'
- · Custom sizes available

### **ACOUSTICAL PERFORMANCE**

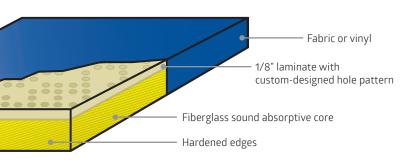
Panel wrapped in woven polyester fabric

Frequency (Hz)	125	250	500	1K	2K	4K	NRC
1-1/8" thick with 5/8" holes*	0.09	0.56	0.99	1.02	0.76	0.52	0.85
1-1/8" thick with 1/2" holes*	0.51	0.98	1.07	1.04	0.81	0.57	1.00
2-1/8" thick with 1/2" holes*	0.73	0.96	1.06	1.05	0.82	0.57	0.95
1-1/8" thick with 1/2" holes**	0.72	1.02	1.14	1.09	0.87	0.62	1.05

<sup>\*</sup>Absorption Coefficent per ASTM C423

#### COMPOSITION

- 6-7 PCF density fiberglass core
- Perforated laminate face with randomized pattern of 1/2" diameter holes, 5/8 inch optional
- Chemically hardened edges
- · Wrapped in fabric from Guilford of Maine, or factory-approved customer-selected material



#### **APPLICATIONS**

- · Interior surfaces where superior acoustical performance is required
- Schools/classrooms
- Auditoriums
- · Conference rooms
- · Reception areas
- Churches
- Office spaces
- · Media & multi-purpose rooms
- · Home theaters
- Pro theaters

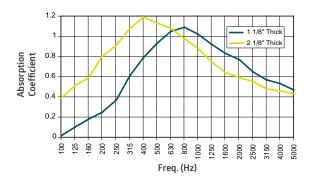
#### MOUNTING

- · HardSide impaling clips with adhesive
- · Rotofast clips for ceilings
- · Z-Clips (movable)
- · Velcro (movable)

#### **EDGE OPTIONS**



## **ABSORPTION PER ASTM C423**



## **SCATTERING PER ISO 17497-1**













<sup>\*\*</sup>Scattering Coefficient per ISO-17497-1