

BRING THE SCIENCE OF TUNED ABSORPTION/DIFFUSION TO LIGHT IN BEAUTIFUL WOOD FINISHES. TAD REVEALED UNCOVERS THE VARIABLE-IMPEDANCE DIFFUSIVE DESIGN OF OUR FABRIC-WRAPPED TAD PANELS TO ACHIEVE SIMILAR ACOUSTIC RESULTS IN A VISUALLY REVEALING WAY.

It is well known that larger listening spaces (auditoriums, lecture halls, rehearsal rooms) need reverberation control. The typical solution is the basic fabric-wrapped fiberglass panel. While inexpensive and good for mid-tones, the high frequency absorption with these panels can be excessive when combined with other absorptive materials, people's clothing, seats, curtains, and carpet. This leaves spaces sounding flat and lifeless. Speech intelligibility is also reduced when lower frequency reverberation dominates higher frequencies.

Kinetics **TAD (Tuned Absorber/Diffuser) Revealed** offers a solution where more balanced sound absorption and high

frequency diffusion are desirable. Openings in the laminate are sized and spaced to optimize absorption in low to mid frequencies while creating random reflective surfaces between openings (variable impedance). The result is a room with blended high frequencies as well as good middle tone absorption. For increased low frequency absorption, a 2" to 4" thick fibrous core can be specified.

TAD Revealed panels are not just for large spaces. Properly balance critical listening spaces using TAD Revealed panels in recording/mixing studios, broadcast booths and home theaters.



# TAD REVEALED / ACOUSTICAL WOOD COLLECTION

#### **COMPOSITION**

#### STANDARD SIZES

- MDF core with wood veneer surface (optional fire rated MDF core available)
- · Black acoustical scrim backing
- Fiberglass sound absorptive core

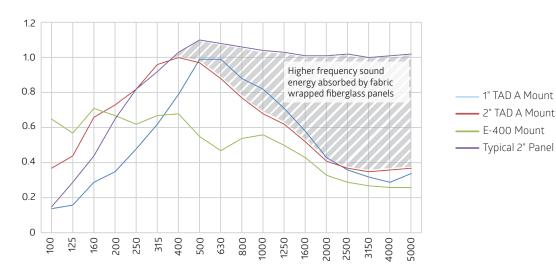
• 2'x2', 2'x4', 4'x4', 4'x6' and 4'x8'

### **ACOUSTICAL PERFORMANCE**

|                  | Bass |      |      |      | Mid Range |      |      |      |      |      |      | Treble |      |      |      |      |      |      |      |
|------------------|------|------|------|------|-----------|------|------|------|------|------|------|--------|------|------|------|------|------|------|------|
| Frequency (Hz)   | 100  | 125  | 160  | 200  | 250       | 315  | 400  | 500  | 630  | 800  | 1000 | 1250   | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | NRC  |
| 1" TAD A Mount   | 0.14 | 0.16 | 0.29 | 0.35 | 0.48      | 0.62 | 0.79 | 0.99 | 0.99 | 0.88 | 0.82 | 0.71   | 0.58 | 0.43 | 0.36 | 0.32 | 0.29 | 0.34 | 0.70 |
| 2" TAD A Mount   | 0.37 | 0.44 | 0.66 | 0.73 | 0.82      | 0.96 | 1.00 | 0.97 | 0.88 | 0.77 | 0.68 | 0.62   | 0.52 | 0.41 | 0.37 | 0.35 | 0.36 | 0.37 | 0.70 |
| E-400 Mount*     | 0.65 | 0.57 | 0.71 | 0.67 | 0.62      | 0.67 | 0.68 | 0.55 | 0.47 | 0.54 | 0.56 | 0.50   | 0.43 | 0.33 | 0.29 | 0.27 | 0.26 | 0.26 | 0.50 |
| Typical 2" Panel | 0.15 | 0.29 | 0.44 | 0.65 | 0.82      | 0.92 | 1.03 | 1.10 | 1.08 | 1.06 | 1.04 | 1.03   | 1.01 | 1.01 | 1.02 | 1.00 | 1.01 | 1.02 | 1.00 |

Absorption Coefficient per ASTM C423 \*Tested with R11 fiberglass backer · Noise Reduction Coefficient (NRC) frequencies shown in blue

### TAD REVEALED ABSORPTION COEFFICIENTS



### **WOOD OPTIONS**

| Veneer  | Core   | Matching                            | Cuts  | Finish   | Edges  |  |  |
|---|--|-------------------------------------|---|--|--|--|--|
| Maple* Cherry* Oak* Walnut* Birch* Mahogany* Custom | MDF* Fire Rated NAUF-MDF* NAUF-MDF FR Particleboard CARB.2 | Random*<br>Book<br>Slip<br>Sequence | Plain Sliced (flat)*<br>Quarter<br>Rift<br>Rotary | Clearcoat (38 sheen)*<br>Laminate<br>Paint<br>Unfinished** | Bare MDF*<br>Stain / Painted<br>Edge Banded<br>Trim Pieces |  |  |

## FSC° Certification Available

\*Select for shortest lead time and / or cost savings \*\*To be finished in the field if matching other wood

# **Wood Notes:**

The beauty of wood is that it varies in color, grain pattern, and overall appearance and texture. Wood products are hydroscopic and therefore will shrink and expand with changes in humidity.





