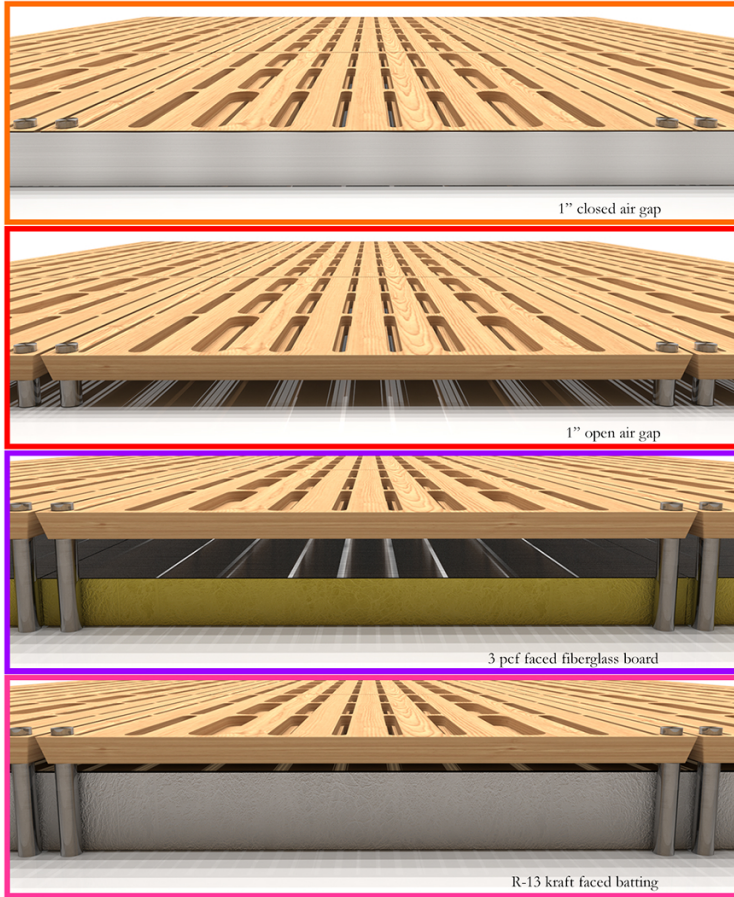


DIFFUSE Signature Supplemental Acoustical Performance Data

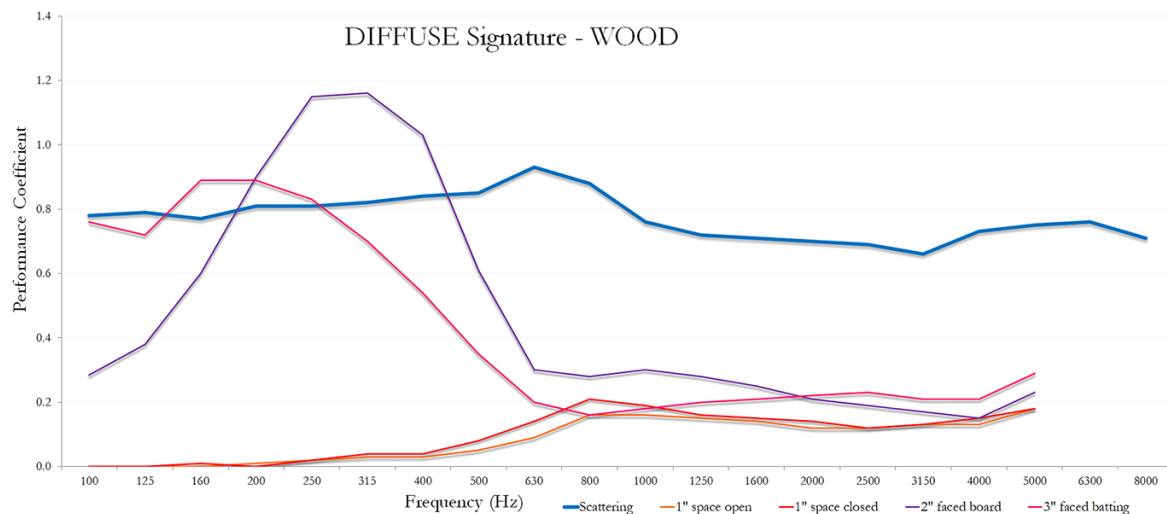
DIFFUSE Signature | WOOD

DIFFUSE Signature absorption tests were conducted at Johns Manville Technical Center in accordance with ASTM C-423a industry standard test methods. Scattering tests were conducted at NWAA Labs in accordance with ISO 17497-2 industry standard test methods and cross correlated at Sound Kinetics Labs.



ISO - 17497 - 2			ASTM C-423a			
f (hz)	Scattering		Absorption			
			1" standoff sides closed	1" standoff sides open	3.5" + faced fiberglass board	3.5" + faced batting
100	0.78		0.00	0.00	0.28	0.76
125	0.79		0.00	0.00	0.38	0.72
160	0.77		0.01	0.00	0.60	0.89
200	0.81		0.00	0.01	0.90	0.89
250	0.81		0.02	0.02	1.15	0.83
315	0.82		0.04	0.03	1.16	0.70
400	0.84		0.04	0.03	1.03	0.54
500	0.85		0.08	0.05	0.61	0.35
630	0.93		0.14	0.09	0.30	0.20
800	0.88		0.21	0.16	0.28	0.16
1000	0.76		0.19	0.16	0.30	0.18
1250	0.72		0.16	0.15	0.28	0.20
1600	0.71		0.15	0.14	0.25	0.21
2000	0.70		0.14	0.12	0.21	0.22
2500	0.69		0.12	0.12	0.19	0.23
3150	0.66		0.13	0.13	0.17	0.21
4000	0.73		0.15	0.13	0.15	0.21
5000	0.75		0.18	0.18	0.23	0.29
6300	0.76					
8000	0.71	SAA	0.11	0.09	0.57	0.40
		NRC	0.10	0.10	0.50	0.40

Notes: Scattering is calculated as the total difference (delta) between perfect scattering half sphere and the product under test. For diffuser testing, ideal data is extracted by testing multiple angles to create a half sphere of sound pressure. The EASE attenuation balloon is a very accurate representation of this half sphere and is available from NWAA Labs or Arithmetic Design.



ARITHMETIC

For additional testing data, please contact Arithmetic Design, Inc.
Verification of results is available from Sound Kinetics Labs and Johns Manville Technical Center.