3form

Acoustic Absorption Data Sheet

Acoustic Absorption Values for 3form Materials and Products

Acoustic absorption refers to a material or product's ability to remove sound energy from a space and as a result, reduce reverberation time. Three measures of absorption are reported below:

NRC (Noise Reduction Coefficient) - Single number rating that uses rounded average sound absorption coefficients at 250, 500, 1000 and 2000 Hz octave band frequencies. The higher the value, the better the material absorbs sound.

SAA (Sound Absorption Average) - Single number rating that uses average sound absorption coefficients for the twelve one-third octave bands from 200 - 2500 Hz. The higher the value, the better the material absorbs sound.

α_w (Alpha-w) - Single number rating calculated using a detailed method of averaging for 250, 500, 1000, 2000 and 4000 Hz octave bands and comparing to reference curve.

Acoustical testing was conducted in accordance with the following:

ASTM C423; "*Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method*"
ISO 354; *"Acoustics- Measurement of sound absorption in a reverberation room"*

Single number ratings of acoustic absorption allow for a quick assessment of materials and products, but in some cases the full, detailed absorption data should be considered. Full, formalized test reports are available by request.

All materials have acoustic properties and associated ratings. For best acoustic results use a mix of high, medium, and low absorption materials.

PRODUCT	MOUNT*	NRC	SAA	ALPHA-W
Clario	E400	0.70	0.69	0.65H
Clario Cloud	E400	0.75	0.77	0.70MH
Desk Partition (Sola Felt)	A	0.35	0.34	0.25H
Divy	K	0.75	0.76	0.70H
Edge (Sola Felt)	J	0.55	0.58	0.60H
Hush Bar	A	0.80	0.78	0.55MH
Hush Blocks	A	0.80	0.79	0.65MH
Hush Base	A	0.95	0.92	0.85
Hush Clad	A	0.35	0.34	0.25H
Seeyond	A	1.10†	1.08	1.00
Tetria (Sola Felt)	E400	0.90	0.89	0.90
Velo (Sola Felt)	E400	0.85	0.84	0.85

*Sound absorption mounting types

A-Mount - laid directly against the test surface with no airspace behind the panel.

J-Mount - As spaced objects distributed throughout the chamber according to specifications using Edge Hourglass shaped fins.

E-400 Mount - 400 mm airspace to resemble suspended grid ceiling.

K-Mount - placed in upright position at an oblique angle to and at least 1.52 m (60in.) from all walls.

†Testing standards allow for NRC values greater than 1.0. This occurs when the three dimensional

properties of the product boost the absorption above what is possiblefor flat sufaces.