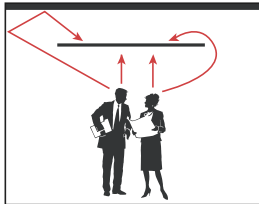




Formations Acoustics Testing Data – Sound Absorption in Sabin

Sabin–Definition

When it is important:



A measure of sound absorption provided by a material when installed within an architectural space. The number of Sabin per unit is approximately equal to the total surface area of the unit (in sq. ft.) that is exposed to sound, multiplied by the absorption coefficient of the material.

Formations Acoustical Clouds provide greater sound absorption than a continuous ceiling of the same surface area because the sound is absorbed from both the front and back surfaces

of the cloud. The more “live” the space, the greater will be the effect on reverberation time from the addition of clouds.

Sabin per unit is preferred to characterize the absorption provided by an individual “space absorber,” such as a baffle, canopy or cloud in:

- Open offices or retail spaces
- Corridors/lobbies

Factors that may affect the installed acoustical performance relative to the published results are:

- Size of cloud
- Number of clouds and their layout (horizontal and vertical)

- Suspension distance below exposed deck or finished ceiling
- Location and horizontal overlap of clouds
- Ceiling tile selection

48" Suspension**	6 ft x 6 ft	8 ft x 8 ft	10 ft x 10 ft
Ultima (1911)	35 Sabin *,**	60 Sabin *,**	95 Sabin *,**
Optima Open Plan (3250)	53 Sabin	86 Sabin	135 Sabin
Optima Vector (3900)	54 Sabin	86 Sabin	136 Sabin
MetalWorks Perforated with acoustical fleece and fiberglass infill	56 Sabin	95 Sabin	142 Sabin

16" Suspension***	6 ft x 6 ft	8 ft x 8 ft	10 ft x 10 ft
Ultima (1911)	36 Sabin*,***	60 Sabin*,***	94 Sabin*,***
Optima Open Plan (3250)	46 Sabin	74 Sabin	116 Sabin
Optima Vector (3900)	48 Sabin	74 Sabin	117 Sabin
MetalWorks with acoustical fleece and fiberglass infill	49 Sabin	80 Sabin	118 Sabin

* Published results are the Sabin averaged over the following frequencies: 500, 1000, 2000, 4000 Hz

** Testing done according to ASTM C423, J mounting, at a distance of 48" below the exposed deck or finished ceiling

*** Testing done according to ASTM C423, J mounting, at a distance of 16" below the exposed deck or finished ceiling

For additional information, contact TechLine.