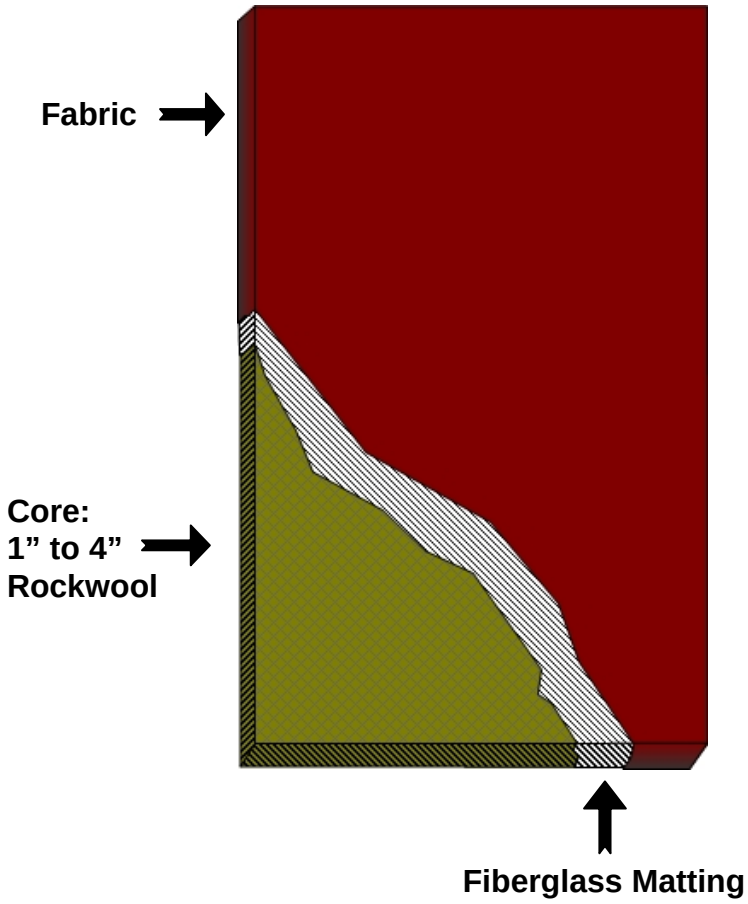
SõN™ Acoustics
Panel Specifications

About SõN™ Acoustics

SõN Acoustics are high-performance panels that provide acoustical control by absorbing echo and excessive reverberation in a room. These panels are designed for interior room applications on both the walls and ceiling, becoming part of a room's aesthetic.

SõN panels are made of a patented composite for enhanced performance and wide frequency absorption. The special composite of Rockwool and fiberglass matting is more flame retardant and environmentally friendly than ordinary core materials. It's a "green" solution to acoustical control.

SõN panels have been rigorously tested to meet stringent Class A fire ratings. Standard panels are available in 2" thickness and in 2'x2', 2'x4', and 4'x4' dimensions. A variety of colors are also available.



SõN controls the background noise in a restaurant.

SõN™ Acoustics
2" SPECIFICATIONS

- All panels shall consist of 2" thick rock wool core, with fiberglass mat front and back, fabric-wrapped.
- All product cores shall have a melting point of 1,850° F (ASTM E-136), a Flame Spread of 0 and Smoke Developed rating 0, a tensile strength minimum of 2,631 lbs/ft² breaking load, a compressive resistance of 480 lbs/ft² at 10% compression, and a horizontal sag of not more than 1/2" in 4 ft.
- Since these special patented cores have a Flame Spread of 0 and a Smoke Developed rating of 0, the rating of the cloth used would be the rating of the panel as a unit.
- All NRC numbers shall be in accordance with ASTM C423 for Type A mounting, and certifiable acoustical data as obtained by an NVLAP-approved, independent testing laboratory shall be submitted to verify whether or not the sound absorption at specified frequencies is satisfactory for a given project.

Minimum NRC for 2" panels shall be as follows:

Frequency	125	250	500	1000	2000	NRC
Coefficient	0.51	1.01	1.24	1.25	1.16	1.15

Notes on Fire Ratings

Class A or Class A as a Unit

Fire protection is always a concern with interior products, and there are various rating methods. In the standard tunnel test, two things are measured. 'Flame Spread' and 'Smoke Developed' numbers are then given to the product according to these standard testing procedures. For Flame Spread, Class A requires 25 or less, while the Smoke Developed rating is 150 or less for some and 450 or less for others.

The fact is that fiberglass board (used by other manufacturers) is barely rated Class A in most tests at Flame Spread 25. Every manufacturer appears to use a Class A cloth to cover their products and claims a Class A product, when the fact is that the cloth, fiberglass board, and glue that holds it all together will burn as a unit.

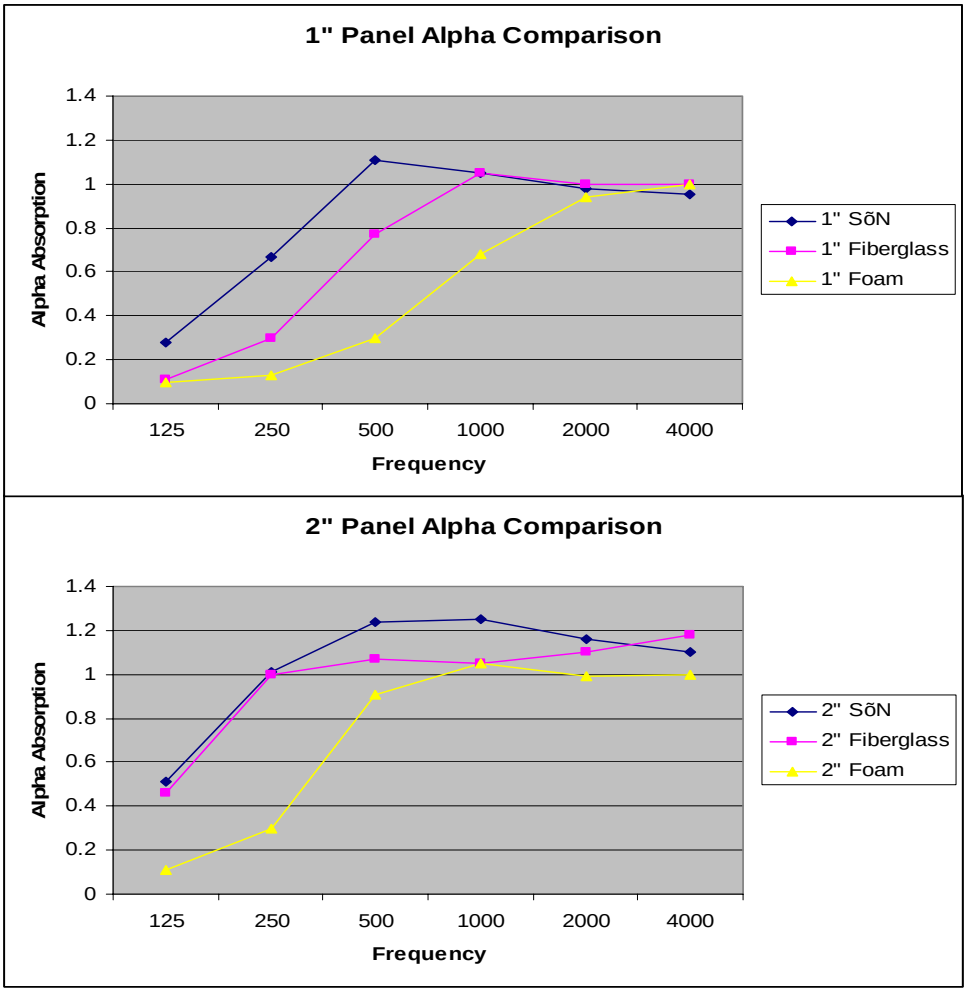
In the past, this type product was the only choice, but with a Flame Spread of 10 and Smoke Developed 95 as a unit, the use of such products might be deemed negligent under certain circumstances! MSR supplies superior patented acoustical products that have the highest NRC, the best compressive and tensile strengths, and the best fire ratings without costing more than their fiberglass counterparts.
There is clearly a better choice: SõN™ Acoustics by MSR, Inc.

Notes on Absorption Coefficients

Alpha and NRC – What Do They Mean?

Absorption devices are defined by a coefficient called Alpha. The higher the Alpha coefficient, the better the absorption character of the panel. Alpha is specified in octave bands from 125 Hz to 4 kHz, with high numbers across all the frequency bands being desirable. (The theoretical limit is 1, but testing procedures sometimes result in values slightly greater than 1.) The Noise Reduction Coefficient (NRC) is an average number across the four middle bands from 250 Hz to 2 kHz. It is useful for quick comparisons between products.

Many products have limited usefulness at low frequencies, which may result in a boomy character to the sound of a treated room. Pay close attention to the bands below 500 Hz when choosing absorption panels. The chart below shows a comparison of SõN panels against standard fiberglass and foam materials of equal thicknesses. Notice that SõN panels are often over 20% more effective than their fiberglass counterparts. Also notice that in some cases (e.g. 500 Hz), SõN panels are three times more effective than foam sheets!



Installation Recommendations

There are several installation options for SõN panels. It is recommended that you place the panels on furring strips in order to provide an air gap behind them. This improves their low frequency performance and can, in some cases, improve aesthetics. The mounting clips provided with the panels should be used in conjunction with adhesives to secure the panels to the wall surface. For your own safety, DO NOT use these impale mounting clips on their own. Please follow one of the recommendations below, or contact MSR, Inc. for further advice.