

AcoustiFence Acoustic Barrier Membrane

AcoustiFence® is an excellent easy to use sound barrier, with a unique scientifically proven characteristic that sets it apart from other non-structural sound barriers when dealing with very low frequencies such as railroad and truck road noise.

In frequencies of 50 Hz and below, AcoustiFence actually begins to vibrate from the low frequency sound waves. In essence it is transforming these low frequency sound waves into mechanical movement and internal friction energy.

Laboratory tests indicate that this transformation process reduces low frequencies from penetrating the AcoustiFence by over 60 percent relative to the human ear. In addition AcoustiFence becomes an absorbent material in these frequencies with test results showing an NRC (noise reduction coefficient) as high as 0.78 (1.00 being the maximum).

With these results it is clear that AcoustiFence not only reduces sound as a barrier, but also in very low frequencies, acts as a highly effective acoustical absorbent material which does not reflect back audible low frequency noise as other barriers would normally do.

Technical Specifications

Acoustifence® Acoustical Test Data

Performed by an Independent Certified Test Lab in the Lab
(Outdoor results will be less depending on environment.)

Specimen Area: 6.0 Sq. Ft.		Specimen: Acoustifence Sound Barrier Material				
Filler Area: 134.0 Sq. Ft.						
Operator: W. Green						
	Bkgrd	Absorp	Source	Receive	Filler	Specimen
Temp F	73.9	74.0	73.1	73.9	73.1	73.7
R. H. %	65.7	65.7	63.3	65.7	61.4	65.1

Freq (Hz)	Bkgrd SPL (dB)	Absorp (Sabines / Sq. Ft.)	Source SPL (dB)	Receive SPL (dB)	Filler TL (dB)	Specimen TL (dB)	95% Conf Limit	No. of Deficiencies	Trans Coef Diff
80	43.0	52.5	84.2	63.7	36.3	11	2.54	0	11.7
100	39.2	59.1	87.7	62.9	40.3	15	3.77	0	12.0
125	47.4	55.9	91.5	63.7	47.5	18	2.02	0	15.9
160	43.4	50.4	94.2	68.8	46.2	16	1.06	0	16.5
200	43.0	54.9	97.9	73.5	49.6	15	0.80	3	21.3
250	35.8	53.0	99.3	72.2	51.0	18	1.12	3	19.8
315	33.7	57.2	95.7	67.5	54.0	18	0.53	6	22.1
400	33.3	56.0	95.0	64.6	58.4	21	0.78	6	24.3
500	31.6	56.3	98.8	65.4	60.5	24	0.30	4	23.4
630	25.1	57.7	101.5	66.9	65.2	25	0.53	4	26.9
800	25.2	59.9	101.3	63.8	67.4	27	0.54	3	26.4
1000	23.2	62.6	101.0	61.9	72.2	29	0.49	2	29.8
1250	23.8	69.4	105.1	63.7	78.0	31	0.28	1	33.8
1600	20.1	70.2	111.4	68.8	81.8	32	0.22	0	36.3
2000	15.0	76.3	107.4	63.2	79.9	33	0.22	0	33.2
2500	7.5	86.9	105.9	59.3	74.8	35	0.23	0	26.3
3150	8.4	102.0	106.6	58.0	77.8	36	0.33	0	28.0
4000	7.7	124.9	105.6	55.0	81.1	37	0.33	0	30.2
5000	8.1	162.8	104.1	51.0	81.0	39	0.36	0	28.7

STC Rating = 28 (Sound Transmission Class)

Deficiencies = 32 (Number of deficiencies versus contour curve)

