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BISCO® Silicones

Typical Product Properties

BISCO® HT-200 Acoustic Sound Barrier (Loaded Silicone Rubber)

<u>SOUND TRANSMISSION LOSS</u>		
Typical of HT-200 at Various Weights		
AREAL DENSITY	TYPICAL STC RATING	TEST METHOD
1- ½ psf	29	ASTM E 90
1 psf	27	ASTM E 90
¾ psf	25	ASTM E 90
½ psf	22	ASTM E 90
<u>OTHER PHYSICAL PROPERTIES</u>		
Typical of HT-200 with Fiberglass at 1 psf		
Thickness	0.1"	---
Flame Spread (I _r)	<15	ASTM E 162
Smoke Density – Flaming (D _s – 4 minutes) (D _s – 1.5 minutes)	<75 <5	ASTM E-662

HT-200 Acoustic Sound Transmission Data -ASTM E-90 and ASTM E-413

FREQ	0.25 PSF			0.50 PSF			0.75 PSF			1.0 PSF			1.5 PSF		
	TL	CL	DEF	TL	CL	DEF	TL	CL	DEF	TL	CL	DEF	TL	CL	DEF
100	8	0.17	0	15	0.33	0	16	0.23	0	19	0.33	0	20	0.40	0
125	7	0.12	0	12	0.27	0	14	0.29	0	14	0.24	0	15	0.26	0
160	7	0.19	0	12	0.26	0	13	0.32	0	17	0.38	0	18	0.32	0
200	8	0.33	0	12	0.32	0	15	0.37	0	16	0.35	1	19	0.31	0
250	8	0.31	1	14	0.42	1	17	0.36	1	19	0.42	1	21	0.43	1
315	8	0.31	4	13	0.40	5	18	0.28	3	19	0.36	4	20	0.37	5
400	10	0.31	5	15	0.32	6	19	0.34	5	20	0.30	6	23	0.34	5
500	11	0.31	5	16	0.35	6	20	0.35	5	22	0.36	5	24	0.32	5
630	13	0.27	4	19	0.33	4	22	0.29	4	24	0.29	4	26	0.34	4
800	14	0.28	4	21	0.28	3	24	0.30	3	26	0.28	3	28	0.31	3
1000	16	0.24	3	22	0.24	3	25	0.27	3	28	0.28	2	30	0.28	2
1250	17	0.19	3	24	0.24	2	27	0.28	2	30	0.25	1	33	0.27	0
1600	19	0.21	1	26	0.19	0	29	0.21	0	21	0.23	0	34	0.28	0
2000	21	0.18	0	27	0.21	0	30	0.19	0	33	0.18	0	36	0.19	0
2500	22	0.18	0	29	0.18	0	32	0.17	0	34	0.18	0	38	0.23	0
3150	23	0.12	0	31	0.15	0	34	0.14	0	36	0.15	0	40	0.18	0
4000	25	0.10	0	31	0.11	0	36	0.10	0	38	0.11	0	41	0.12	0
5000	27	0.10	0	32	0.12	0	37	0.08	0	40	0.10	0	43	0.11	0
STC	16			22			25			27			29		

FREQ = Frequency, Hertz (cps.); TL = Transmission Loss, dB; CL = Uncertainty in dB for a 95% Confidence Limit; DEF = Deficiencies, dB < STC Contour; STC = Sound Transmission Class

Flame Spread, Optical Density and Oxygen Index – ASTM E-162, ASTM E-662 & ASTM D-2863				
Identification	0.5 PSF	1.0 PSF	1.5 PSF	Specified Maximum
I _s	5	12	10.2	25
D _s Flaming	62	74	94	100
D _s Non Flaming	19	22	28	100
Oxygen Index, %	50.2	N/A	N/A	N/A
O.S.U. Heat Release Results – Specified Max must be met in both peak and total release rates and expressed as a ration of peak to average total release over a two minute duration				
	0.25 PSF	0.5 PSF	1.0 PSF	Unit of Measure
Peak Release	70.7	96.9	87.80	kW-min/m ²
Avg. Tot Release	47.3	91.5	50.70	kW-min/m ²

I_s = Flame Spread Index; D_s = Specific Optical Density after 4.0 minutes.

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