NOISE REDUCTION RATING (NRR) SPECIFICATIONS

Talk Through Your Ears®, RadioGear®, Phantom™ and CellEarz™
CUSTOM EARSETS

Custom-Acrylic (solid earpieces and earpieces with toggle filter in closed position)

Attenuation Data (re: ANSI S3.19-1974)										NRR	CSA CLASS
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	26	AL
Mean Attenuation in dB	33.1	34.9	34.5	33.0	34.2	40.7	40.7	44.8	43.2		
Standard Deviation in dB	3.9	4.2	4.9	3.7	3.1	4.6	4.7	4.9	4.8		

Custom-Silicone

Attenuation Data (ANSI S3.19-1974)										NRR	CSA CLASS
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	26	AL
Mean Attenuation in dB	30.6	27.7	30.3	31.3	37.9	43.4	44.7	41.8	41.1		
Standard Deviation in dB	3.2	3.5	3.3	3.4	3.0	3.7	3.7	4.6	4.0		

Custom Filtered-HiFi

Attenuation Data (ANSI S3.19-1974)										NRR	CSA CLASS
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	19	BL
Mean Attenuation in dB	30.0	26.8	28.5	27.7	25.3	25.9	22.7	40.1	37.6		
Standard Deviation in dB	5.2	3.6	4.2	2.8	2.6	2.0	1.8	3.7	3.3		

Custom Filtered-Lite (including earpieces with toggle filter in open position)

Attenuation Data (ANSI S3.19-1974)										NRR	CSA CLASS
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	11	C
Mean Attenuation in dB	19.4	16.1	16.1	15.8	19.9	25.9	23.2	25.4	22.2		
Standard Deviation in dB	3.5	2.8	3.1	2.7	2.9	4.4	4.5	3.8	4.8		

Custom Filtered-Impulse

Attenuation Data (ANSI S3.19-1974)										NRR	CSA CLASS
Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	13	B
Mean Attenuation in dB	12.4	13.9	18.8	22.1	27.3	28.3	29.4	37.7	32.8		
Standard Deviation in dB	4.0	3.6	3.9	4.6	4.0	3.6	5.1	4.6	4.6		

*Example impulse peak lab data for Impulse Filter

IMPULSE FILTER: Impulse Peak Insertion Loss
per ANSI S12.42-2010

Chart: X-axis "Impulse peak level (dB)" with values 110, 130, 150, 158, 166. Y-axis "Impulse Reduction in dB" ranging 15 to 35.
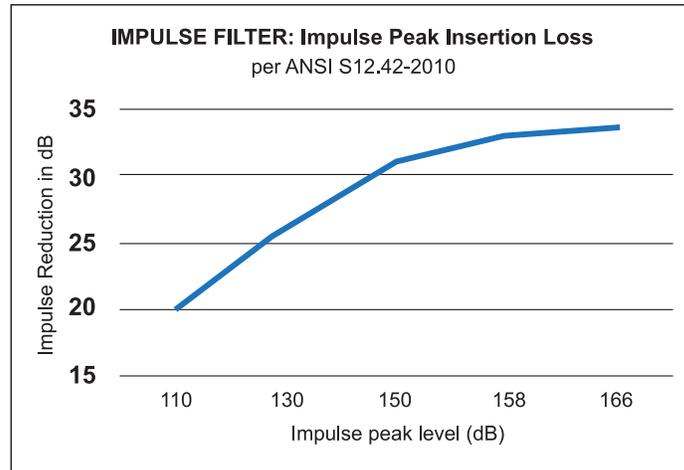
The level of noise entering a person's ear, when the hearing protector is well-fitted and worn as directed, is approximated by the difference between the environmental noise level and the NRR (A-weighted environmental noise measurements must be corrected by 7 dB). For instructions on how to apply the CSA Class in Canada, refer to CSA Z94.2-14: Hearing Protection Devices – Performance, Selection, Care, and Use.

A more precise estimate of field performance can be determined by Individual Fit Testing. This personalized test is performed under typical wear conditions and results in a "Personal Attenuation Rating" (PAR) for each worker. Contact CavCom to learn more about applying NRR data and options for Individual Fit Testing.

Cautions

- Although hearing protectors can be effective against the harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noise such as gunfire. See IPIL data for estimates of protection against impulse noise.
- Improper fit of this device will reduce its effectiveness in attenuating noise. Consult CavCom's product instructions for guidance on proper fit, care and use.

* Comply is a registered trademark of Hearing Components, Inc.