Foam Ear Plugs

Hearing Protector Model	L F	J.S. Noise Reduction Rating (NRR)	Average Real Ear Attenuation in Laboratory (tested according to ANSI S3.19-1974) CSA Class* (Canada)											
Soft Foam			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000		
Ear Plugs		28 dB	MEAN (dB)	24.7	28.9	35.1	36.4	39.1	41.9	43.0	45.2	45.5	AL	
1120			STANDARD DEVIATION (dB)	5.3	3.8	4.1	3.4	3.6	3.3	3.0	4.2	3.2		
0 1 10 1	-													
Corded Soft Foam Ear			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	AL	
Plugs		28 dB	MEAN (dB)	26.3	28.3	33.3	35.1	37.2	41.8	43.4	43.8	43.4		
1130			STANDARD DEVIATION (dB)	3.8	3.1	3.2	3.0	2.7	4.6	3.9	3.6	4.7		
Foam Ear	-													
		00.40	FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	AL	
Plugs 1100		29 dB	MEAN (dB)	33.9	37.7	39.8	38.5	37.0	41.9	42.7	45.5	44.6		
			STANDARD DEVIATION (dB)	4.7	5.5	5.6	4.8	3.1	3.8	3.4	4.0	3.4		
Corded				405	250	500	4000	2000	2450	1000	6200	0000		
Foam Ear		20 dB		125	250	500	1000	2000	3150	4000	6300	0008	A1	
Plugs		29 UD	MEAN (dB)	33.9	37.7	39.8	38.5	37.0	41.9	42.7	45.5	44.6	AL	
1110			STANDARD DEVIATION (dB)	4.7	5.5	5.6	4.8	3.1	3.8	3.4	4.0	3.4		
											,	°CSA Z	294.2-1994	
Note: Research suggests that the NRR may significantly overestimate the protection provided by hearing protectors in real-world, workplace conditions. 3M recommends reducing the NRR by 50% before estimating workplace protection. 3M hearing protectors are most effective when they are worn properly and worn for the entire time that you are exposed to loud noise.														

Reusable Ear Plugs

Hearing Protector Model	U.S. Noise Reduction Rating (NRR)	Average Real Ear Attenuation in Laboratory (tested according to ANSI S3.19-1974) (Canada											
Reusable		FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	AL	
Ear Plugs	24 dB	MEAN (dB)	27.2	27.9	31.0	30.9	34.2	35.8	37.5	39.9	41.7		
1260		STANDARD DEVIATION (dB)	4.3	3.7	3.6	3.1	3.8	3.0	3.9	4.2	5.1		
Corded		FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	AL	
Ear Plugs	24 dB	MEAN (dB)	28.7	30.1	32.8	33.8	34.5	35.6	36.2	39.9	42.2		
1270		STANDARD DEVIATION (dB)	5.0	5.0	4.6	4.1	3.5	3.4	4.0	4.5	5.3		
Corded Reusable Ear		FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	AL	
Plugs with	24 dB	MEAN (dB)	28.7	30.1	32.8	33.8	34.5	35.6	36.2	39.9	42.2		
1271		STANDARD DEVIATION (dB)	5.0	5.0	4.6	4.1	3.5	3.4	4.0	4.5	5.3		
											*CSA Z	294.2-1994	

Note: Research suggests that the NRR may significantly overestimate the protection provided by hearing protectors in real-world, workplace conditions. 3M recommends reducing the NRR by 50% before estimating workplace protection. 3M hearing protectors are most effective when they are worn properly and worn for the entire time that you are exposed to loud noise.

Banded Hearing Protectors

Hearing Protector Model	Headband Position	U.S. Noise Reduction Rating (NRR)		Ave (1	rage testeo	Real d acc	Ear A ordin	ttenu g to A	ation	in La S3.19	abora)-1974	tory I)	CSA Class* (Canada)
Banded Hearing	under chin		FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	BL
		20 dB	MEAN (dB)	21.9	21.1	22.4	24.0	34.4	40.2	40.6	44.1	46.5	
			STANDARD DEVIATION (dB)	4.7	2.8	3.2	2.5	3.0	2.5	2.8	3.2	2.5	
Protector 1310	behind head	21 dB	FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	BL
1310			MEAN (dB)	21.6	20.9	23.0	24.5	34.0	40.3	40.7	44.0	46.2	
			STANDARD DEVIATION (dB)	3.0	2.6	2.3	2.4	2.7	3.4	3.7	4.9	3.9	
			-	_				_				*CSA Z	294.2-1994

Note: Research suggests that the NRR may significantly overestimate the protection provided by hearing protectors in real-world, workplace conditions. 3M recommends reducing the NRR by 50% before estimating workplace protection. 3M hearing protectors are most effective when they are worn properly and worn for the entire time that you are exposed to loud noise.

Ear Muffs

Hearing Protector Model	Headband Position	U.S. Noise Reduction Rating (NRR)	Average Real Ear Attenuation in Laboratory c (tested according to ANSI S3.19-1974) (Ca										
Low Profile			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	
Ear Muffs	over head	22 dB	MEAN (dB)	14.0	17.5	25.0	35.8	34.3	33.4	34.2	33.7	33.2	В
1425			STANDARD DEVIATION (dB)	2.9	2.4	2.2	3.5	3.3	1.6	2.3	2.3	2.0	
	over head	27 dB	FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	
			MEAN (dB)	19.5	22.9	31.7	40.8	36.1	41.5	41.1	40.4	38.4	A
			STANDARD DEVIATION (dB)	2.9	2.1	2.2	3.2	3.1	2.7	2.4	2.3	2.9	
Three			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	
Position Ear	behind head	27 dB	MEAN (dB)	20.4	22.8	30.4	39.5	36.1	41.6	42.1	41.1	39.5	
Muffs 1427			STANDARD DEVIATION (dB)	4.2	2.0	1.8	2.8	2.0	3.6	2.8	2.3	2.5	
			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	A
	under chin	26 dB	MEAN (dB)	18.5	22.8	31.0	40.1	35.7	40.3	41.3	39.8	37.9	
			STANDARD DEVIATION (dB)	3.4	2.7	2.2	2.2	2.4	3.9	3.0	2.5	2.6	

*CSA Z94.2-1994

Note: Research suggests that the NRR may significantly overestimate the protection provided by hearing protectors in real-world, workplace conditions. 3M recommends reducing the NRR by 50% before estimating workplace protection. 3M hearing protectors are most effective when they are worn properly and worn for the entire time that you are exposed to loud noise.

Ear Muffs

Hearing Protector Model	Headband Position	U.S. Noise Reduction Rating (NRR)	Average Real Ear Attenuation in Laboratory (tested according to ANSI S3.19-1974) (Ca										
General			FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	в
Purpose Ear Muffs 1435	over head	23	MEAN (dB)	15.0	20.9	27.5	30.8	33.5	33.8	36.9	36.1	36.9	
			STANDARD DEVIATION (dB)	3.0	2.8	2.8	2.4	2.7	3.1	3.1	3.2	3.7	
Padded Ear	over head	24	FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	в
Muffs			MEAN (dB)	15.5	21.8	28.1	29.6	30.5	35.0	39.0	39.9	40.1	
1440			STANDARD DEVIATION (dB)	2.2	2.2	2.7	1.7	2.0	2.4	2.4	2.8	3.2	
Ear Muffs for	mounted on hard hat		FREQUENCY (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	в
Hard Hats 1450		23	MEAN (dB)	15.8	21.0	28.3	29.3	30.2	35.1	38.6	39.8	38.9	
			STANDARD DEVIATION (dB)	2.9	2.4	2.7	1.8	1.9	3.4	2.6	3.4	4.2	

*CSA Z94.2-1994

Note: Research suggests that the NRR may significantly overestimate the protection provided by hearing protectors in real-world, workplace conditions. 3M recommends reducing the NRR by 50% before estimating workplace protection. 3M hearing protectors are most effective when they are worn properly and worn for the entire time that you are exposed to loud noise.