

## ACOUSTIC EDUCATION

### Noise Level Data Tables

The table below presents noise data at octave-band center frequencies for familiar residential, outdoor, transportation and building activity noise sources. Intermittent or peak noises may exceed the data given in the table by 5 dBA or more, depending on the source or environment. For many practical problems, however, the data can be considered to be typical source levels at the given distance and condition, or average general activity levels for interiors. The data can be used for design purposes if proper consideration is given to especially load equipment or sources which may exceed it, unusual site conditions, and any other conditions that deviate from the normal. For example, it is prudent to measure transportation noise at proposed building sites near highways, airports, etc., so design data will represent existing noise sources and reflect specific site features.

Sound Pressure level dBA									
Example Source	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dBA
<b>Home</b>									
Alarm Clock @ 4' - 9'	N/A	46	48	55	62	62	70	80	80
Electric Shaver @ 1.5'	59	58	49	62	60	64	60	59	68
Vacuum Cleaner @ 3'	48	66	69	73	79	73	73	72	81
Garbage Disposal @ 2'	64	83	69	56	55	50	50	49	69
Clothes Washer @ 2'-3'	59	65	59	59	58	54	50	46	62
Toilet (refilling tank)	50	55	53	54	57	56	57	52	63
Whirlpool (filling tub)	68	65	68	69	71	71	68	65	74
Window Air Conditioner	64	64	65	56	53	48	44	37	59
Ringling Telephone @ 4'-13'	N/A	41	44	56	68	73	69	83	83
TV @ 10'	49	62	64	67	70	68	63	39	74
Stereo (teenager volume)	60	72	83	82	82	80	75	60	86
Stereo (adult volume)	56	66	75	72	70	66	64	48	75
Violin @ 5'	N/A	N/A	91	91	87	83	79	66	92
Normal Conversation @ 3'	N/A	57	62	63	57	48	40	N/A	63

<b>Outdoors</b>									
Birds @ 10'	N/A	N/A	N/A	N/A	N/A	50	52	54	57
Large Barking Dog @ 50'	N/A	50	58	68	70	64	52	48	72
Lawn Mower @ 5'	85	87	86	84	81	74	70	72	86
Pistol Shoot @ 250'	N/A	N/A	N/A	83	91	99	102	106	106
Surf (moderate seas) @ 10'	71	72	70	71	67	64	58	54	78
Wind In Trees	N/A	N/A	N/A	33	35	37	37	35	43

<b>Transportation</b>									
Large Truck 55MPH @ 50'	83	85	83	85	81	76	72	65	86
Passenger Cars 55MPH @ 50'	72	70	67	66	67	66	59	54	71
Motorcycle full throttle @ 50"	95	95	91	91	91	87	87	85	95
Snowmobile @ 50'	65	82	84	75	78	77	79	69	85
Train @ 100'	95	102	94	90	86	87	83	79	94
Train Siren @ 50'	88	90	110	110	107	100	91	78	109
Car Horn @ 15'	N/A	N/A	N/A	92	95	90	80	60	97
Commercial Airline @ 1 mile	77	82	82	78	70	56	N/A	N/A	79
Military Helicopter @ 500'	92	89	83	81	76	72	62	51	80

<b>Interiors</b>									
Amplified Rock Music	116	117	119	116	118	115	109	102	121
Audiovisual Room	85	89	92	90	89	87	85	80	94
Applause at Auditorium	60	68	75	79	85	84	75	65	88
Classroom	60	66	72	77	74	68	60	50	78
Computer Equipment Room	N/A	N/A	90	104	106	101	89	79	108

Dog Kennel	N/A	N/A	90	104	106	101	89	79	108
Gymnasium	72	78	84	89	86	80	72	64	90
Kitchen	86	85	79	78	77	72	65	57	81
Laboratory	65	70	73	75	72	69	65	61	77
Library	60	63	66	67	64	58	50	40	68
Mechanical Equipment Room	87	86	85	84	86	82	80	78	88
Music Praticce Room	90	94	96	96	96	91	91	90	100
Racquetball Court	82	85	80	85	83	75	68	62	86
Reception & Lobby Areas	60	66	72	77	74	68	60	50	78
Teleconference Rooms	65	74	78	80	79	75	68	60	83