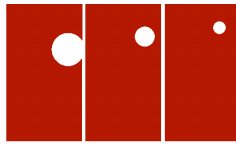


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NOISE LEVEL DATA

THE TABLE 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 dB OR MORE, DEPENDING ON THE SOURCE OR ENVIRONMENT.

| Source | Sound Pressure Level (dB) | | | | | | | | dBA |
|---|---------------------------|--------|--------|--------|---------|---------|---------|---------|-----|
| | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | |
| Home | | | | | | | | | |
| Alarm clock at 4 to 9 ft (ringing) | - | 46 | 48 | 55 | 62 | 62 | 70 | 80 | 80 |
| Electric shaver at 1 1/2 ft | 59 | 58 | 49 | 62 | 60 | 64 | 60 | 59 | 68 |
| Vacuum cleaner at 3 ft | 48 | 66 | 69 | 73 | 79 | 73 | 73 | 72 | 81 |
| Garbage disposal at 2 ft | 64 | 83 | 69 | 56 | 55 | 50 | 50 | 49 | 69 |
| Clothes washer at 2 to 3 ft (wash cycle) | 59 | 65 | 59 | 59 | 58 | 54 | 50 | 46 | 62 |
| Toilet (refilling tank) | 50 | 55 | 53 | 54 | 57 | 56 | 57 | 52 | 63 |
| Whirlpool, six nozzles (filling tube) | 68 | 65 | 68 | 69 | 71 | 71 | 68 | 65 | 74 |
| Window air-conditioning unit | 64 | 64 | 65 | 56 | 53 | 48 | 44 | 37 | 59 |
| Telephone at 4 to 13 ft (ringing) | - | 41 | 44 | 56 | 68 | 73 | 69 | 83 | 83 |
| TV at 10 ft | 49 | 62 | 64 | 67 | 70 | 68 | 63 | 39 | 74 |
| Stereo (teenager listening level) | 60 | 72 | 83 | 82 | 82 | 80 | 75 | 60 | 86 |
| Stereo (adult listening level) | 56 | 66 | 75 | 72 | 70 | 66 | 64 | 48 | 75 |
| Violin at 5 ft (fortissimo) | - | - | 91 | 91 | 87 | 83 | 79 | 66 | 92 |
| Normal conversational speech at 3 ft | - | 57 | 62 | 63 | 57 | 48 | 40 | - | 63 |
| Outdoor | | | | | | | | | |
| Birds at 10 ft | - | - | - | - | - | 50 | 52 | 54 | 57 |
| Cicadas | - | - | - | - | 35 | 51 | 54 | 48 | 57 |
| Large dog at 50 ft (barking) | - | 50 | 58 | 68 | 70 | 64 | 52 | 48 | 72 |
| Lawn mower at 5 ft | 85 | 87 | 86 | 84 | 81 | 74 | 70 | 72 | 86 |
| Pistol shot at 250 ft (peak impulse levels) | - | - | - | 83 | 91 | 99 | 102 | 106 | 106 |
| Surf at 10 to 15 ft (moderate seas) | 71 | 72 | 70 | 71 | 67 | 64 | 58 | 54 | 78 |
| Wind in trees (10 mi/h) | - | - | - | 33 | 35 | 37 | 37 | 35 | 43 |
| Transportation | | | | | | | | | |
| Large trucks at 50 ft (55 mi/h) | 83 | 85 | 83 | 85 | 81 | 76 | 72 | 65 | 86 |
| Passenger cars at 50 ft (55 mi/h) | 72 | 70 | 67 | 66 | 67 | 66 | 59 | 54 | 71 |
| Motorcycle at 50 ft (full throttle, without baffle) | 95 | 95 | 91 | 91 | 91 | 87 | 87 | 85 | 95 |
| Snowmobile at 50 ft | 65 | 82 | 84 | 75 | 78 | 77 | 79 | 69 | 85 |
| Train at 100 ft (pulling hard) | 95 | 102 | 94 | 90 | 86 | 87 | 83 | 79 | 94 |
| Train siren at 50 ft | 88 | 90 | 110 | 110 | 107 | 100 | 91 | 78 | 109 |
| Car horn at 15 ft | - | - | - | 92 | 95 | 90 | 80 | 60 | 97 |
| Commercial turbofan airplane at 1 mile (from takeoff flight path) | 77 | 82 | 82 | 78 | 70 | 56 | - | - | 79 |
| Military helicopter at 500 ft (single engine, medium size) | 92 | 89 | 83 | 81 | 76 | 72 | 62 | 51 | 80 |



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| Source | Sound Pressure Level (dB) | | | | | | | | dBA |
|--|---------------------------|--------|--------|--------|---------|---------|---------|---------|-----|
| | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | |
| Interiors | | | | | | | | | |
| Amplified rock music performance (large arena) | 116 | 117 | 119 | 116 | 118 | 115 | 109 | 102 | 121 |
| Audiovisual room | 85 | 89 | 92 | 90 | 89 | 87 | 85 | 80 | 94 |
| Auditorium (applause) | 60 | 68 | 75 | 79 | 85 | 84 | 75 | 65 | 88 |
| Classroom | 60 | 66 | 72 | 77 | 74 | 68 | 60 | 50 | 78 |
| Computer equipment room | 78 | 75 | 73 | 78 | 80 | 78 | 74 | 70 | 84 |
| Dog kennel | - | - | 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 | 83 | 82 | 80 | 78 | 88 |
| Music practice room | 90 | 94 | 96 | 96 | 96 | 91 | 91 | 90 | 100 |
| Racquetball court | 82 | 85 | 80 | 85 | 83 | 75 | 68 | 62 | 86 |
| Reception and lobby area | 60 | 66 | 72 | 77 | 74 | 68 | 60 | 50 | 78 |
| Teleconference | 65 | 74 | 78 | 80 | 79 | 75 | 68 | 60 | 83 |

SOURCE: JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, SOUND & VIBRATION, NOISE CONTROL ENGINEERING JOURNAL AND TECHNICAL PUBLICATIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY AND NATIONAL BUREAU OF STANDARDS (U.S.).