



Noise Thermometer

Sound Energy Doubles Every 3 dB

Example: if a 90 dB noise is doubled, it measures 93 dB

Non-Occupational Noise

Occupational Noise

Immediate Physical Damage 160 dB

Immediate Physical Damage 160 dB

Immediate Pain Threshold 130 dB

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Severe Irritation to the Ear 120 dB

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Unprotected Noise Exposure of Any Duration Not Permitted Above This Level 115 dB

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Extremely Loud 100 dB

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Hearing Protection Required by OSHA 90 dB

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Ear Damage Possible 85 dB

Ear Damage Possible 85 dB

Non-Hazardous 65 dB

Non-Hazardous 65 dB

Comfortable 50 dB

Comfortable 50 dB

Threshold of Audibility 20 dB

Threshold of Audibility 20 dB

0 dB

0 dB

Fireworks 162 dB		Shotgun 170 dB
Firecracker 150 dB	Balloon Pop 157 dB	
Engine Backfire 140 dB	Noisy Squeeze Toys 135 dB	Bicycle Horn 143 dB
Auto Racing 130 dB		
Thunder 120 dB	Jet Plane at Ramp 120 dB	
Rock Concert 120 dB	Chainsaw 118 dB	
Stadium 117 dB		
Crying Baby 110 dB	CD Player 105 dB	
Motorcycle 105 dB		
Power Lawnmower 94 dB	Subway 90 dB	
Cockpit of Propeller Airplane 88 dB		
Smoke Alarm 85 dB	Blender 85 dB	
Hair Dryer 80 dB		
Vacuum Cleaner 74 dB	Alarm Clock 75 dB	
Sewing Machine 60 dB	Microwave Oven 58 dB	Dishwasher 60 dB
Background Music 50 dB	Rainfall 50 dB	
Flowing Stream 50 dB		
Quiet Library 40 dB		
Quiet Residential Area 40 dB	Refrigerator 43 dB	
Audible Whisper 30 dB		
	Normal Breathing 10 dB	

Handgun 166 dB	Apollo Lift-Off 188 dB	
M1 Rifle 161 dB	Artillery Fire 162 dB	
Jet Engine Take-Off 150 dB		
Dynamite Blast 140 dB		
Pig Squeal 130 dB	Jackhammer 130 dB	
Oxygen Torch 121 dB		
Hammer on Nail 120 dB		
Generator 116 dB		
Compactor 116 dB		
Ambulance Siren 112 dB	Impact Wrench 102 dB	
Diesel Truck Accelerating 114 dB		
Bulldozer 100 dB	Industrial Fire Alarm 95 dB	
Table Saw 93 dB		
Forklift 87 dB		
Elevator 85 dB		
Handsaw 85 dB	Ringling Telephone 82 dB	
Garbage Disposal 80 dB	Lathe 81 dB	
Normal Conversation 60 dB	Large Office 50 dB	
Paper Rustling 50 dB	Transformer 50 dB	
Quiet Office 40 dB		

15 Min
30 Min
1 Hour
2 Hours
4 Hours
8 Hours

OSHA Permissible Exposure Limits



by Honeywell