

Construction Noise Calculations

Demolition

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Concrete Saw	90	1	20	50	0	0	90.0	83.0
Excavator	85	1	40	50	0	0	85.0	81.0
Dozers	85	1	40	50	0	0	85.0	81.0
							92.0	87.0

Site Preparation

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Dozers	85	1	40	50	0	0	85.0	81.0
Tractor	84	1	40	50	0	0	84.0	80.0
Front-End Loaders	80	1	40	50	0	0	80.0	76.0
Backhoe	80	1	40	50	0	0	80.0	76.0
							89.0	85.0

Grading

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Excavator	85	1	40	50	0	0	85.0	81.0
Grader	85	1	40	50	0	0	85.0	81.0
Dozers	85	1	40	50	0	0	85.0	81.0
Scraper	85	1	40	50	0	0	85.0	81.0
Tractor	84	1	40	50	0	0	84.0	80.0
Front-End Loaders	80	1	40	50	0	0	80.0	76.0
Backhoe	80	1	40	50	0	0	80.0	76.0
							92.0	88.0

Building Construction

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Cranes	85	1	16	50	0	0	85.0	77.0
Forklift	85	1	20	50	0	0	85.0	78.0
Generator	82	1	50	50	0	0	82.0	79.0
Tractor	84	1	40	50	0	0	84.0	80.0
Welder	73	1	40	50	0	0	73.0	69.0
Front-End Loaders	80	1	40	50	0	0	80.0	76.0
Backhoe	80	1	40	50	0	0	80.0	76.0
							91.0	86.0

Paving

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Paver	85	1	50	50	0	0	85.0	82.0
Front-End Loaders	80	1	40	50	0	0	80.0	76.0
Rollers	85	1	20	50	0	0	85.0	78.0
							89.0	84.0

Architectural Coating

RCNM Construction Equipment	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor ¹	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA)	
							Lmax	Leq
Compressor	80	1	40	50	0	0	80.0	76.0
							80.0	76.0