APPENDIX C

NOISE MEASUREMENTS AND CALCULATIONS

Noise Measurement Data Sheets and Photographs

FIELD NOISE MEASUREMENT DATA

PROJECT: Mt. SAC Library Replacement PROJ. # 3MT5010800

SITE IDENTIFICATION: Site 1 OBSERVER(S): FFARHANG
START DATE/TIME: 10/20/25 ; 8:26 END DATE/TIME: 10/20/25 ; 9:10
ADDRESS: 12619 Sleepy Hollow Ct.

METEOROLOGICAL CONDITIONS:
TEMP: 61- °F HUMIDITY: 60 %R.H. WIND: ☐ CALM ☒ LIGHT ☐ MODERATE ☐ VARIABLE
WINDSPEED: 0-2 MPH DIR: ☐ N ☐ NE ☒ E ☐ SE ☐ S ☐ W ☐ NW ☒ STEADY ☐ GUSTY
SKY: ☒ SUNNY ☒ CLEAR ☐ OVRCST ☐ PRTLY CLOUDY ☐ FOG ☐ RAIN ☐ OTHER:

ACOUSTIC INSTRUMENTS:
INSTRUMENT: Larson Davis LXT-1 TYPE: ☒ 1 ☐ 2 SERIAL #: 0004615
CALIBRATOR: Larson Davis CAL200 SERIAL #: 12648
CALIBRATION CHECK: PRE-TEST 113.95 dBA SPL POST-TEST 113.95 dBA SPL WINDSCREEN ✓
SETTINGS: ☒ A-WEIGHTED ☒ SLOW ☐ FAST ☐ FRONTAL ☒ RANDOM ☐ ANSI ☐ OTHER: ____

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
102	8:26	8:46	49.2	62.0	45.6	46.9	48.2	50.2			
103	8:50	9:10	47.4	54.7	43.6	45.0	47.1	48.8			

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: ☐ TRAFFIC ☐ AIRCRAFT ☐ RAIL ☐ INDUSTRIAL ☒ AMBIENT ☐ OTHER: ____
ROADWAY TYPE:

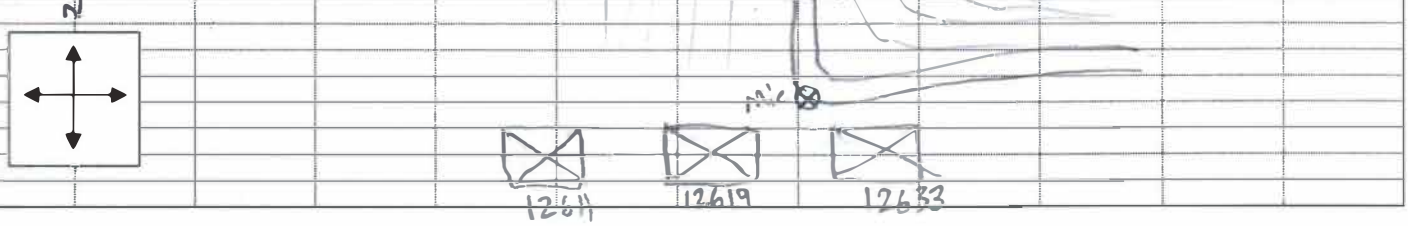
TRAFFIC COUNT DURATION: ____ -MIN			____ SPEED		#2 COUNT		____ SPEED	
	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB
AUTOS								
MED. TRUCKS:								
HVY TRUCKS:								
BUSES:								
MOTORCYCLES:								

SPEED ESTIMATED BY: ☐ RADAR ☐ DRIVING ☐ OBSERVER

OTHER SOURCES: ☒ DIST. AIRCRAFT ☐ RUSTLING LEAVES ☐ DIST. BARKING DOGS ☒ BIRDS ☐ DIST. INDUSTRIAL
☐ DIST. CHILDREN PLAYING ☒ DIST. TRAFFIC ☐ DIST. LANDSCAPING ACTIVITIES ☐ OTHER: ____

DESCRIPTION/SKETCH:
TERRAIN: ☐ HARD ☒ SOFT ☒ MIXED ☐ FLAT ☐ OTHER:
PHOTOS: ✓
OTHER COMMENTS/SKETCH:

- One aircraft overflight at 8:41
- Dist. " " at 9:59



FIELD NOISE MEASUREMENT DATA

PROJECT: Mt. SAC Library Replacement PROJ. # 3MTS010800

SITE IDENTIFICATION: Site 2 OBSERVER(S): FFARHANG
START DATE/TIME: 10/20/25 ; 9:34 END DATE/TIME: 10/20/25
ADDRESS: 20926 Granite Wells Dr.

METEOROLOGICAL CONDITIONS:
TEMP: 69 °F HUMIDITY: 45 %R.H. WIND: ☐ CALM ☒ LIGHT ☐ MODERATE ☐ VARIABLE
WINDSPEED: 2-4 MPH DIR: ☐ N ☐ NE ☒ E ☒ SE ☐ S ☐ W ☐ NW ☐ STEADY ☐ GUSTY
SKY: ☒ SUNNY ☒ CLEAR ☐ OVRCST ☐ PRTLY CLOUDY ☐ FOG ☐ RAIN ☐ OTHER:

ACOUSTIC INSTRUMENTS:
INSTRUMENT: Larson Davis LXT-1 TYPE: ☒ 1 ☐ 2 SERIAL #: 0004615
CALIBRATOR: Larson Davis CAL200 SERIAL #: 12648
CALIBRATION CHECK: PRE-TEST 114.10 dBA SPL POST-TEST 113.92 dBA SPL WINDSCREEN ✓
SETTINGS: ☒ A-WEIGHTED ☒ SLOW ☐ FAST ☐ FRONTAL ☒ RANDOM ☐ ANSI ☐ OTHER: ____

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
104	9:34	9:54	48.8	66.4	41.3	42.7	44.6	50.7			
105	9:56	10:16	48.4	65.9	40.5	41.9	43.6	50.2			

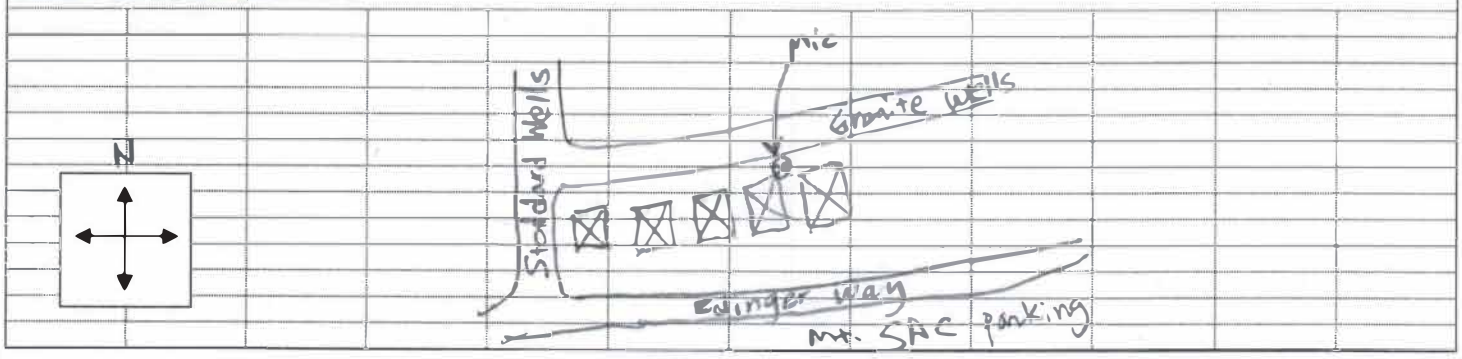
COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: ☐ TRAFFIC ☐ AIRCRAFT ☐ RAIL ☐ INDUSTRIAL ☒ AMBIENT ☐ OTHER: ____
ROADWAY TYPE:

TRAFFIC COUNT DURATION: ____ -MIN	____ SPEED		#2 COUNT	____ SPEED	
☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB
AUTOS							
MED. TRUCKS:							
HVY TRUCKS:							
BUSES:							
MOTORCYCLES:							

SPEED ESTIMATED BY: ☐ RADAR ☐ DRIVING ☐ OBSERVER
OTHER SOURCES: ☐ DIST. AIRCRAFT ☐ RUSTLING LEAVES ☒ DIST. BARKING DOGS ☒ BIRDS ☐ DIST. INDUSTRIAL
☐ DIST. CHILDREN PLAYING ☒ DIST. TRAFFIC ☒ DIST. LANDSCAPING ACTIVITIES ☐ OTHER: ____

DESCRIPTION/SKETCH:
TERRAIN: ☐ HARD ☒ SOFT ☐ MIXED ☐ FLAT ☐ OTHER:
PHOTOS: ✓
OTHER COMMENTS/SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Mt. SAC Library Replacement PROJ. # 3MTS010800

SITE IDENTIFICATION: Site 3 OBSERVER(S): FFARHANG
START DATE/TIME: 10/20/25; 10:33 END DATE/TIME: 10/20/25;
ADDRESS: Walnut Heights Apts, 20700 San Jose Hills Rd

METEOROLOGICAL CONDITIONS:
TEMP: 74 °F HUMIDITY: 40 %R.H. WIND: ☐ CALM ☒ LIGHT ☐ MODERATE ☐ VARIABLE
WINDSPEED: 0-2 MPH DIR: ☐ N ☐ NE ☐ E ☐ SE ☒ S ☐ W ☐ NW ☐ STEADY ☐ GUSTY
SKY: ☒ SUNNY ☒ CLEAR ☐ OVRCST ☐ PRTLY CLOUDY ☐ FOG ☐ RAIN ☐ OTHER:

ACOUSTIC INSTRUMENTS:
INSTRUMENT: Larson Davis LXT-1 TYPE: ☒ 1 ☐ 2 SERIAL #: 0004615
CALIBRATOR: Larson Davis CAL200 SERIAL #: 12648
CALIBRATION CHECK: PRE-TEST 113.95 dBA SPL POST-TEST _____ dBA SPL WINDSCREEN ✓
SETTINGS: ☐ A-WEIGHTED ☐ SLOW ☐ FAST ☐ FRONTAL ☐ RANDOM ☐ ANSI ☐ OTHER: ____

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
106	10:33	10:48	51.9	62.4	48.5	49.8	51.1	53.6			
107	10:52	11:07	51.3	60.6	47.4	48.8	50.4	53.4			

COMMENTS:

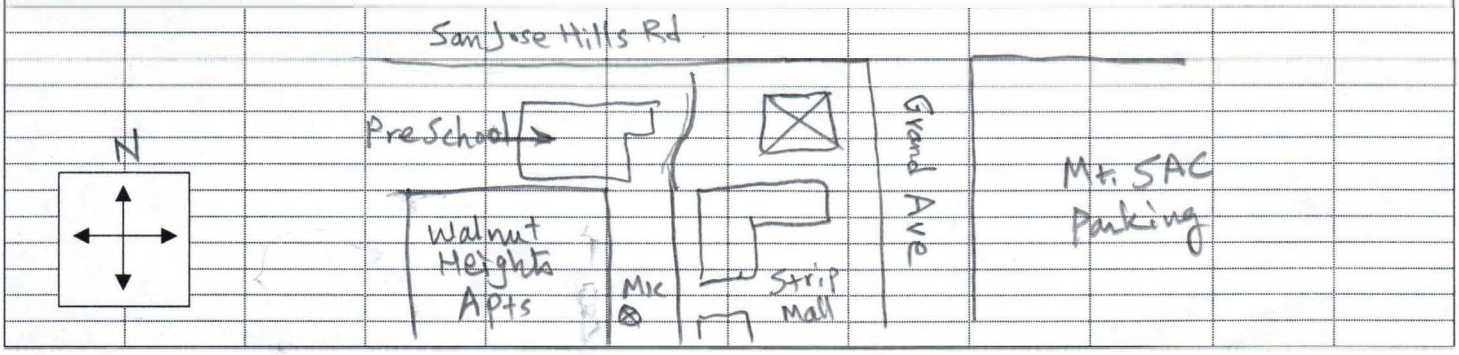
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: ☐ TRAFFIC ☐ AIRCRAFT ☐ RAIL ☐ INDUSTRIAL ☒ AMBIENT ☐ OTHER: ____
ROADWAY TYPE:

TRAFFIC COUNT DURATION: ____-MIN	____ SPEED	#2 COUNT	____ SPEED
☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB	☐NB/☐EB	☐SB/☐WB
AUTOS								
MED. TRUCKS:								
HVY TRUCKS:								
BUSES:								
MOTORCYCLES:								

SPEED ESTIMATED BY: ☐ RADAR ☐ DRIVING ☐ OBSERVER

OTHER SOURCES: ☒ DIST. AIRCRAFT ☐ RUSTLING LEAVES ☐ DIST. BARKING DOGS ☐ BIRDS ☐ DIST. INDUSTRIAL
☒ DIST. CHILDREN PLAYING ☒ DIST. TRAFFIC ☐ DIST. LANDSCAPING ACTIVITIES ☐ OTHER: ____

DESCRIPTION/SKETCH:
TERRAIN: ☒ HARD ☐ SOFT ☐ MIXED ☒ FLAT ☐ OTHER:
PHOTOS:
OTHER COMMENTS/SKETCH:



Ambient Noise Measurement Photographs at Site 1

Looking North

Looking East

Looking South

Looking West

Ambient Noise Measurement Photographs at Site 2

Looking North

Looking East

Looking South

Looking West

Ambient Noise Measurement Photographs at Site 3

Looking North

Looking East

Looking South

Looking West

On-Site Construction Equipment
Noise and Vibration Calculations

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2025
Case Description: Mt. SAC Library Project - Demolition

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residential to the South	Residential	49	46	40

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	2625	5
Tractor	No	40	84		2625	5
Concrete Saw	No	20		89.6	2625	5

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	44.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	50.2	43.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	50.2	45.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residential to the North	Residential	48	46	40

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	1614	10
Tractor	No	40	84		1614	10
Concrete Saw	No	20		89.6	1614	10

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	41.5	37.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	43.8	39.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	49.4	42.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	49.4	45.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Noise Sensitive Uses to the West	Residential	51	49	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	1920	10
Tractor	No	40	84		1920	10
Concrete Saw	No	20		89.6	1920	10

Results

		Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		40	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw		47.9	40.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	47.9	43.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/24/2025
Case Description: Mt. SAC Library Project - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the South	Residential	49	46	40

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		2625	5
Scraper	No	40		83.6	2625	5
Tractor	No	40	84		2625	5

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	45.6	41.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	44.2	40.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	44.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	45.6	45.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the North	Residential	48	46	40

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1614	10
Scraper	No	40		83.6	1614	10
Tractor	No	40	84		1614	10

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	44.8	40.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	43.4	39.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	43.8	39.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	44.8	44.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Noise Sensitive Uses to the West	Residential	51	49	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1920	10
Scraper	No	40		83.6	1920	10
Tractor	No	40	84		1920	10

Results

		Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		43.3	39.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		41.9	37.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	43.3	43.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2025
Case Description: Mt. SAC Library Project - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the South	Residential	49	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		2625	5
Dozer	No	40		81.7	2625	5
Tractor	No	40	84		2625	5
Tractor	No	40	84		2625	5

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Grader		45.6	41.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		44.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		44.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	45.6	46.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the North	Residential	48	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1614	10
Dozer	No	40		81.7	1614	10
Tractor	No	40	84		1614	10
Tractor	No	40	84		1614	10

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Grader		44.8	40.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		41.5	37.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		43.8	39.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Tractor		43.8	39.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	44.8	45.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Noise Sensitive Uses to the West	Residential	51	49	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		1920	10
Dozer	No	40		81.7	1920	10
Tractor	No	40	84		1920	10
Tractor	No	40	84		1920	10

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		43.3	39.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		40	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	43.3	44.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2025
Case Description: Mt. SAC Library Project - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the South	Residential	49	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	2625	5
Man Lift	No	20		74.7	2625	5
Man Lift	No	20		74.7	2625	5
Generator	No	50		80.6	2625	5
Tractor	No	40	84		2625	5
Welder/ Torch	No	40		74	2625	5
Welder/ Torch	No	40		74	2625	5
Welder/ Torch	No	40		74	2625	5

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	41.1	33.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	35.3	28.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	35.3	28.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	41.2	38.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	44.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	44.6	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the North	Residential	48	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1614	10
Man Lift	No	20		74.7	1614	10
Man Lift	No	20		74.7	1614	10
Generator	No	50		80.6	1614	10
Tractor	No	40	84		1614	10
Welder/ Torch	No	40		74	1614	10

Welder/ Torch	No	40		74	1614	10
Welder/ Torch	No	40		74	1614	10

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		40.4	32.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift		34.5	27.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift		34.5	27.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator		40.5	37.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		43.8	39.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		33.8	29.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		33.8	29.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		33.8	29.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	43.8	43.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Noise Sensitive Uses to the West	Residential	51	49	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	1920	10
Man Lift	No	20		74.7	1920	10
Man Lift	No	20		74.7	1920	10
Generator	No	50		80.6	1920	10
Tractor	No	40	84		1920	10
Welder/ Torch	No	40		74	1920	10
Welder/ Torch	No	40		74	1920	10
Welder/ Torch	No	40		74	1920	10

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		38.9	30.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift		33	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift		33	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator		38.9	35.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		32.3	28.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		32.3	28.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder/ Torch		32.3	28.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	42.3	41.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 11/24/2025
Case Description: Mt. SAC Library Project - Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the South	Residential	49	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	2420	5

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	39	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	39	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residential to the North	Residential	48	46	40

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	1403	10

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	38.7	34.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	38.7	34.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Noise Sensitive Uses to the West	Residential	51	49	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	1740	10

Results

		Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)		36.8	32.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	36.8	32.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Construction Vibration

	Receptors					
	South		North		West	
	Distance to Closest Receiver (ft)		Distance to Closest Receiver (ft)		Distance to Closest Receiver (ft)	
Distance	2420		1403		1720	
Equipment	**PPV_{ref} (@ 25 ft, in/sec)**	**PPV (in/sec)**	**PPV_{ref} (@ 25 ft, in/sec)**	**PPV (in/sec)**	**PPV_{ref} (@ 25 ft, in/sec)**	**PPV (in/sec)**
Vibratory Roller	0.21	0.000220	0.21	0.00050	0.21	0.00037
Hoe Ram	0.089	0.000093	0.089	0.00021	0.089	0.00016
Large Bulldozer	0.089	0.000093	0.089	0.00021	0.089	0.00016
Caisson Drilling	0.089	0.000093	0.089	0.00021	0.089	0.00016
Loaded Trucks	0.076	0.000080	0.076	0.00018	0.076	0.00013
Jackhammer	0.035	0.000037	0.035	0.00008	0.035	0.00006
Small Bulldozer	0.003	0.000003	0.003	0.00001	0.003	0.00001
Maximum Vibration Levels		**0.00022**		**0.00050**		**0.00037**
Vibration Annoyance Threshold		**0.04**		**0.05**		**0.05**
Exceeds Vibration Annoyance Threshold?		**No**		**No**		**No**

Note: Construction vibration levels are calculated at the setback of the nearest buildings to the Project site within each of the receptor properties.
Source: FTA 2018, Caltrans 2020

Rooftop Mechanical Equipment Operation Noise Data

Rooftop Mechanical Equipment Noise Calculations

Pumps							**Sound Pressure Level (dBA)**			**Receptor 1**		**Receptor 2**		**Receptor 3**	
Mark	Manufacturer	Type	HP	RPM	Reference Sound Power Level (dB)*	Reference Distance (ft)	@ reference Distance	@ 10 ft	@ 50 ft	Distance (ft)	Sound Level (dBA)	Distance (ft)	Sound Level (dBA)	Distance (ft)	Sound Level (dBA)
CHWP-1	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-2	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-3	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-4	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-5	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-6	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-7	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
CHWP-8	Bell & Gossett	Base Mounted End Suction	15	1750	75.2	3	73.2	67.9	54.0	2625	19.6	1403	25.0	1720	23.2
Condensing Units															
CU-1-1	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-1-2	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-1-3	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-1-4	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-1-5	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-1-6	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-2-1	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-2-2	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-2-3	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-3-1	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-3-2	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
CU-3-3	Daikin	Heat Pump			68.0	3	55.0	49.8	35.8	2625	1.4	1403	6.8	1720	5.1
Heat Recovery Chiller															
HRC-1	MultiStack ARA060X	Modular Heat Recovery			97.0	3	89.5	79.0	65.0	2625.0	30.6	1403	36.1	1720	34.3
Fans															
EF-1	Greenheck	Centrifugal Upblast			84.0	3	76.5	66.0	52.0	2625.0	17.6	1403	23.1	1720	21.3
Air Handling Units															
AHU-1	TITUS DESV				98.7	3	91.2	80.7	66.8	2625.0	32.4	1403	37.8	1720	36.0
AHU-1	TITUS DESV				98.7	3	91.2	80.7	66.8	2625.0	32.4	1403	37.8	1720	36.0
									Overall Sound Level at Receptor (dBA):		**37.3**		**42.8**		**41.0**

* Sound level data are compiled from manufacturer's specifications and data in "Noise Control for Buildings and Manufacturing Plants", BBN, 1982

DAIKIN

DH6VS

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UP TO 19.0 SEER2 & 8.8 HSPF2
1½ TO 5 TONS

DAIKIN *FIT*
HIGH-EFFICIENCY, COMMUNICATING, VARIABLE-SPEED, INVERTER DRIVE SIDE DISCHARGE R-32 SPLIT SYSTEM HEAT PUMP

Contents

R32

Standard Features

- Daikin variable-speed swing compressor
- Quiet digitally commutated fan motor
- High-density compressor sound blanket
- Compatible with Daikin *One+* smart thermostat and other Daikin communicating equipment
- Daikin control algorithmic logic
- Intelligent Defrost Mode
- In communicating mode, only two low-voltage wires to outdoor unit required
- Diagnostic indicator lights, seven-segment LED display, and fault code storage
- Daikin Inside intelligence for diagnostics
- Quiet-mode - provides enhanced acoustical comfort, up to 3 different sound levels (as low as 45dBA)
- Field-selectable boost mode increases compressor speed during unusually high loads
- Field-installed bi-flow filter drier
- Coil and ambient temperature sensors
- Suction pressure transducer
- Muffler on 1.5-3.0-ton models
- Sweat connection service valves with easy access to gauge ports
- Advanced water-shedding drain pan
- Hot start technology
- AHRI Certified; ETL Listed

Cabinet Features

- Heavy-gauge galvanized steel cabinet with grille-style sound control side design
- Custom Ivory white powder-paint finish
- 500-hour salt-spray tested
- High corrosion (ZAM®), unpainted steel bottom frame and legs
- Wire fan discharge grille
- Top and side maintenance access
- When properly anchored, meets the 2023 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)

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12 YEAR UNIT REPLACEMENT LIMITED WARRANTY*

12 YEAR PARTS LIMITED WARRANTY*

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* Complete warranty available from your local dealer or at www.daikincomfort.com. To receive the 12-Year Unit Replacement Limited Warranty and 12-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California, Florida, or Québec. The duration of warranty coverages in Texas and Florida differs in some cases. Other limitations and exclusions apply, refer to complete warranty details for full list of limitations and exclusions. Additional requirements for annual maintenance are required for the 12-Year Unit Replacement Limited Warranty. Changes in law, regulations, or technology may result in an equivalent unit not being available. Other limitations and exclusions apply, refer to complete warranty details for full list of limitations and exclusions, as well as rights and obligations should an equivalent unit not be available.

NORMAL MODE - COOLING		SOUND POWER LEVEL[1]						
TONNAGE	TOTAL UNIT SOUND RATING (dBA)	OCTAVE BAND SPECTRUM FREQUENCY (Hz) ANALYSIS (dB)						
		125	250	500	1000	2000	4000	8000
1.5-ton	61	47.7	53.0	56.9	54.8	48.4	41.2	36.5
2-ton	64	47.8	57.9	60.7	55.8	48.9	43.4	39.1
2.5-ton	66	56.9	57.4	62.0	60.2	54.2	47.4	40.3
3-ton	68	55.9	59.6	63.9	61.0	56.5	53.4	45.4
3.5-ton	70	59.7	63.9	64.6	65.2	60.3	53.8	47.5
4-ton	72	63.5	64.9	65.6	65.4	60.4	55.8	48.8
5-ton	71	61.2	64.7	65.3	65.6	61.3	57.2	48.9

[1] Compliant with AHRI 270.
[2] Compliant with AHRI 220.

NORMAL MODE - HEATING		SOUND POWER LEVEL[1]						
TONNAGE	TOTAL UNIT SOUND RATING (dBA)	OCTAVE BAND SPECTRUM FREQUENCY (Hz) ANALYSIS (dB)						
		125	250	500	1000	2000	4000	8000
1.5-ton	61	48.4	52.3	57.3	54.9	48.7	44.8	40.4
2-ton	63	49.7	55.7	58.6	56.3	50.8	48.6	40.1
2.5-ton	70	56.2	61.4	65.5	64.5	58.4	52.0	44.6
3-ton	71	57.9	62.7	65.6	65.3	59.5	57.6	47.9
3.5-ton	71	60.7	61.3	64.8	66.1	61.5	56.0	50.3
4-ton	71	58.8	62.3	66.0	66.4	61.8	56.8	50.6
5-ton	72	61.0	64.2	66.6	66.7	62.2	57.0	51.3

[1] Compliant with AHRI 270.
[2] Compliant with AHRI 220.

Quiet mode_Cooling

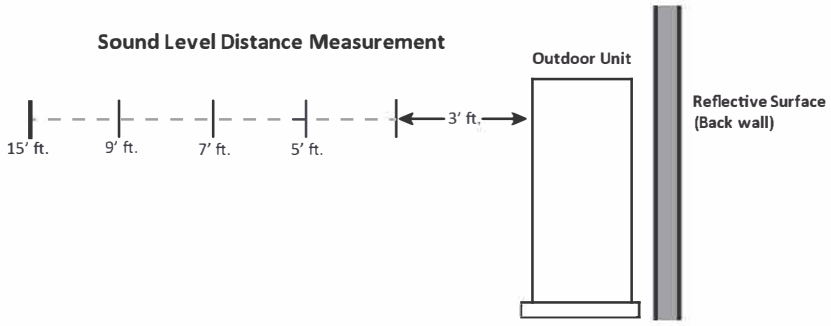
Tonnage	Sound suppression level	Sound Power Level (dBA)1	Sound Pressure Level (dBA)2	Capacity Decrease
1.5-ton	LV.1	63	46	~5%
	LV.2	60	43	~20%
	LV.3	57	40	~40%
2-ton	LV.1	64	47	~5%
	LV.2	61	44	~35%
	LV.3	58	41	~45%
2.5-ton	LV.1	65	51	~5%
	LV.2	62	48	~30%
	LV.3	59	45	~45%
3-ton	LV.1	65	51	~5%
	LV.2	62	48	~35%
	LV.3	59	45	~50%
3.5-ton	LV.1	67	55	~5%
	LV.2	62	50	~45%
	LV.3	57	45	~50%
4-ton	LV.1	67	55	~5%
	LV.2	62	50	~25%
	LV.3	57	45	~45%
5-ton	LV.1	68	55	~5%
	LV.2	63	50	~45%
	LV.3	58	45	~50%

[1] Quiet Mode Sound Power and Sound Pressure levels determined at a distance of 3 [ft].

Quiet mode_Heating

Tonnage	Sound suppression level	Sound Power Level (dBA)1	Sound Pressure Level (dBA)2	Capacity Decrease
1.5-ton	LV.1	65	48	~5%
	LV.2	62	45	~15%
	LV.3	59	42	~40%
2-ton	LV.1	66	49	~15%
	LV.2	63	46	~35%
	LV.3	60	43	~45%
2.5-ton	LV.1	67	53	~10%
	LV.2	64	50	~40%
	LV.3	59	45	~55%
3-ton	LV.1	67	53	~15%
	LV.2	64	50	~40%
	LV.3	59	45	~55%
3.5-ton	LV.1	67	55	~5%
	LV.2	62	50	~35%
	LV.3	57	45	~60%
4-ton	LV.1	67	55	~5%
	LV.2	62	50	~45%
	LV.3	57	45	~60%
5-ton	LV.1	68	55	~20%
	LV.2	63	50	~50%
	LV.3	58	45	~55%

[1] Quiet Mode Sound Power and Sound Pressure levels determined at a distance of 3 [ft].



		SOUND PRESSURE (dBA) COOLING MODE[1]				
		DISTANCE FROM PROPERTY LINE				
TONNAGE	REFLECTIVE SURFACE QTY.	3'	3'	3'	3'	15'
1.5 Ton	0	53	49	46	44	39
	1	56	52	49	47	42
	2	59	55	52	50	45
2.0 Ton	0	56	52	49	47	42
	1	59	55	52	50	45
	2	62	58	55	53	48
2.5 Ton	0	59	54	52	49	45
	1	62	57	55	52	48
	2	65	60	58	55	51
3.0 Ton	0	60	56	53	51	46
	1	63	59	56	54	49
	2	66	62	59	57	52
3.5 Ton	0	63	59	56	54	49
	1	66	62	59	57	52
	2	69	65	62	60	55
4.0 Ton	0	64	60	57	55	50
	1	67	63	60	58	53
	2	70	66	63	61	56
5.0 Ton	0	64	60	57	55	50
	1	67	63	60	58	53
	2	70	66	63	61	56

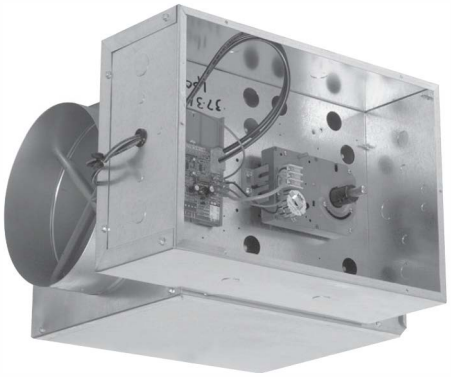
[1] Compliant with AHRI 275 utilizing standard mode, total sound levels

		SOUND PRESSURE (dBA) HEATING MODE[1]				
		DISTANCE FROM PROPERTY LINE				
TONNAGE	REFLECTIVE SURFACE QTY.	3'	3'	3'	3'	15'
1.5 Ton	0	54	49	46	44	40
	1	57	52	49	47	43
	2	60	55	52	50	46
2.0 Ton	0	55	51	48	46	41
	1	58	54	51	49	44
	2	61	57	54	52	47
2.5 Ton	0	62	58	55	53	48
	1	65	61	58	56	51
	2	68	64	61	59	54
3.0 Ton	0	63	59	56	54	49
	1	66	62	59	57	52
	2	69	65	62	60	55
3.5 Ton	0	63	59	56	54	49
	1	66	62	59	57	52
	2	69	65	62	60	55
4.0 Ton	0	64	60	57	54	50
	1	67	63	60	57	53
	2	70	66	63	60	56
5.0 Ton	0	65	61	58	55	51
	1	68	64	61	58	54
	2	71	67	64	61	57

[1] Compliant with AHRI 275 utilizing standard mode, total sound levels

RECOMMENDED PRIMARY AIR CFM RANGES / ALL TERMINALS

Control Types:
- PESV / Pneumatic
- AESV / Analog Electronic
- DESV / Digital Electronic



QUICK SELECTION PROCEDURE

1. Select unit inlet size based upon acoustic parameters and/ or maximum pressure drop requirements, using pages M15-M16
2. Check inlet size selection against cfm control limits based on control type shown on this page
3. Select accessories (multi-outlets, attenuators) as required
4. Select reheat coil, if required. Make your selection using the actual heating flow rate, not cooling.

Inlet Size	Total CFM Range	CFM Ranges of Minimum and Maximum Settings							
		PESV - Pneumatic Titus II Controller		PESV - Pneumatic Titus I Controller		AESV - Analog Electronic TA1 Controller		DESV - Digital Typical Controller	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
4	0-225	50-210	90-225	65-210	90-225	50-225	50-225	30-225	30-225
5	0-350	70-300	125-350	90-300	125-350	70-350	70-350	40-350	40-350
6	0-500	80-345	145-500	100-345	145-500	80-500	80-500	45-500	45-500
7	0-650	120-515	210-650	150-515	210-650	120-650	120-650	70-650	70-650
8	0-900	160-700	285-900	205-700	285-900	160-900	160-900	90-900	90-900
9	0-1050	205-900	370-1050	260-900	370-1050	205-1050	205-1050	120-1050	120-1050
10	0-1400	250-1110	455-1400	325-1110	455-1400	250-1400	250-1400	145-1400	145-1400
12	0-2000	330-1460	600-2000	425-1460	600-2000	330-2000	330-2000	190-2000	190-2000
14	0-3000	525-2335	955-3000	675-2335	955-3000	525-3000	525-3000	300-3000	300-3000
16	0-4000	665-2970	1215-4000	860-2970	1215-4000	665-4000	665-4000	385-4000	385-4000
24 X 16	0-8000	1245-5555	2270-8000	1605-5555	2270-8000	1245-8000	1245-8000	720-8000	720-8000

Note: On controls mounted by Titus but supplied by others (FMA or Factory Mounting Authorization), these values are guidelines only. Controls mounted on an FMA basis are calibrated in the field.

PESV, AESV, DESV / RADIATED SOUND PERFORMANCE

Size	CFM	Min ΔPs	Octave Band Sound Power, Lw																									
			0.5" ΔPs							1.0" ΔPs							1.5" ΔPs							2.0" ΔPs						
			2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
4	100	0.02	49	45	36	33	31	26	11	52	48	39	36	35	31	15	53	50	41	37	37	34	17	55	51	43	38	39	36	18
	125	0.03	52	49	39	36	32	27	16	55	52	42	38	36	32	20	57	54	44	40	39	36	22	58	55	45	41	40	38	23
	150	0.04	55	52	41	37	34	28	20	58	55	44	40	38	34	23	60	57	46	41	40	37	25	61	58	47	42	42	39	27
	175	0.06	58	55	42	39	35	29	23	61	58	46	42	39	34	27	63	59	48	43	41	38	28	64	61	49	44	43	40	30
	200	0.08	60	57	44	40	36	30	25	63	60	47	43	40	35	29	65	62	49	44	42	38	31	66	63	51	45	44	41	33
5	150	0.01	49	44	36	32	31	25	10	53	49	41	36	35	30	16	55	51	43	38	37	33	18	57	53	45	39	39	35	21
	200	0.02	53	48	39	35	34	27	15	56	53	44	38	37	32	21	59	55	46	40	40	35	23	60	57	48	42	41	37	25
	250	0.03	55	52	41	37	35	29	20	59	56	46	40	39	34	24	62	59	49	42	41	37	28	63	61	51	44	43	39	30
	300	0.04	58	54	43	39	37	30	22	62	59	48	42	41	35	28	64	61	50	44	43	38	30	65	63	52	45	44	40	33
	350	0.06	60	56	45	40	38	31	24	63	61	49	43	42	36	30	66	63	52	45	44	39	33	67	65	54	47	45	41	35
6	300	0.07	55	49	40	35	32	28	16	59	54	45	39	37	33	22	61	57	48	41	39	36	25	63	59	50	42	41	38	28
	350	0.10	57	52	42	37	34	29	20	60	57	47	41	38	34	25	62	59	50	43	40	37	28	64	62	52	44	42	39	31
	400	0.13	58	53	44	39	35	30	21	61	58	49	42	39	35	27	63	61	52	44	42	38	30	65	63	54	46	43	40	33
	450	0.16	59	55	45	40	36	31	23	62	60	50	44	40	36	29	64	63	53	46	43	39	33	66	65	55	47	45	41	35
	500	0.20	59	56	47	42	37	32	24	63	61	51	45	41	37	30	65	64	54	47	44	40	34	67	67	56	49	46	42	37
7	450	0.07	59	48	42	38	33	24	20	61	54	48	42	38	30	23	62	57	51	45	41	33	25	63	59	53	46	43	35	28
	500	0.09	60	50	43	39	34	24	22	62	55	49	43	39	30	24	63	58	52	46	42	34	27	64	60	54	48	44	36	29
	550	0.10	60	51	44	40	35	25	22	63	57	50	45	40	31	25	64	59	53	47	43	34	28	66	62	55	49	45	37	31
	600	0.12	61	53	45	42	35	25	23	63	58	51	46	41	31	27	65	61	54	48	44	35	30	66	63	56	50	46	37	33
	650	0.15	62	54	46	43	36	26	24	64	59	52	47	41	32	28	65	62	55	49	44	35	31	66	64	57	51	46	38	34
8	600	0.02	59	50	44	40	38	32	20	62	55	49	43	43	39	24	64	58	52	46	45	44	27	65	60	54	47	47	47	29
	650	0.02	60	51	44	41	39	32	22	63	56	50	44	44	40	25	65	59	53	47	46	45	28	66	61	55	48	48	48	30
	700	0.02	60	52	45	42	40	33	22	63	57	50	45	44	41	25	65	60	53	47	47	45	29	67	62	56	49	49	48	31
	750	0.02	61	53	46	43	40	34	23	64	58	51	46	45	41	27	66	61	54	48	48	46	30	67	63	56	50	50	49	33
	800	0.03	62	54	47	43	41	34	24	65	59	52	47	46	42	28	66	62	55	49	48	47	31	68	64	57	51	50	50	34
9	800	0.04	58	47	43	36	34	30	19	61	53	49	42	40	35	23	62	57	52	46	44	38	26	63	59	55	48	47	40	29
	850	0.04	58	48	43	37	34	31	19	61	54	49	43	41	35	23	63	58	53	46	45	38	27	64	60	55	49	47	40	29
	900	0.05	59	49	44	37	35	31	20	62	55	50	43	41	35	24	64	58	53	47	45	38	27	65	61	56	49	48	40	30
	950	0.06	59	50	44	37	35	31	20	62	56	50	43	42	36	24	64	59	54	47	45	38	28	65	62	56	49	48	40	31
	1000	0.06	60	50	44	38	36	31	22	63	56	50	44	42	36	25	65	60	54	47	46	39	29	66	62	57	50	48	40	31
10	900	0.01	60	50	47	45	42	29	22	63	57	53	50	48	37	27	65	60	57	53	52	41	31	67	63	59	56	54	44	34
	1000	0.01	60	51	48	46	43	30	22	64	58	54	51	49	38	28	66	61	57	54	53	42	31	67	64	59	56	55	45	34
	1100	0.01	61	52	48	47	44	32	23	65	58	54	52	50	39	28	67	62	57	55	54	43	31	68	64	60	57	56	46	35
	1200	0.01	62	53	48	47	45	32	24	65	59	54	53	51	40	28	67	63	58	56	55	44	33	69	65	60	58	57	47	35
	1300	0.01	63	54	49	48	45	33	25	66	60	55	53	52	41	29	68	63	58	56	55	45	33	69	66	61	58	58	48	36
12	1200	0.01	58	50	47	41	37	30	20	62	56	52	47	43	37	26	64	59	56	50	46	41	30	66	61	58	53	49	43	32
	1400	0.01	60	52	48	42	38	32	22	63	57	54	48	45	39	28	65	60	57	52	48	42	31	67	63	60	54	51	45	35
	1600	0.01	61	53	50	43	40	34	24	64	59	55	49	46	40	29	66	62	59	53	50	44	34	68	64	61	55	52	47	36
	1800	0.01	61	55	51	44	41	35	25	65	60	56	50	48	41	30	67	63	60	54	51	45	35	69	65	62	56	54	48	37
	2000	0.01	62	56	52	45	43	36	26	66	61	57	51	49	43	31	68	64	61	55	52	47	36	69	67	63	57	55	49	38
14	1500	0.02	56	51	45	43	40	36	18	60	56	50	48	45	41	24	62	59	53	51	48	45	28	64	61	55	53	50	47	30
	1800	0.03	58	53	46	44	41	36	21	62	58	51	49	46	42	27	64	60	54	52	49	45	29	66	63	56	54	51	48	33
	2100	0.04	59	54	47	45	42	37	22	63	59	52	50	47	43	28	66	62	55	53	50	46	31	67	64	58	55	52	49	34
	2400	0.05	60	55	48	46	43	38	23	64	60	53	51	48	43	29	67	63	56	54	51	47	33	69	65	58	56	53	49	35
	2700	0.06	62	56	49	47	44	38	24	66	61	54	52	49	44	30	68	64	57	55	52	47	34	70	66	59	57	54	50	36
16	2000	0.02	55	48	43	41	39	31	36	59	53	47	45	44	38	21	61	56	50	47	47	41	24	63	58	52	49	49	44	27
	2400	0.02	57	51	45	43	41	33	18	61	56	49	47	46	39	24	64	59	52	49	49	43	28	65	61	54	51	51	46	30
	2800	0.03	59	53	46	44	42	34	21	63	58	51	48	47	41	27	66	61	54	50	50	45	30	67	63	55	52	52	48	33
	3200	0.04	61	55	48	46	44	36	23	65	60	52	50	49	42	29	67	62	55	52	52	46	31	69	64	57	53	54	49	34
	3600	0.05	62	56	49	47	45	37	24	66	61	54	51	50	44	30	69	64	56	53	53	48	34	71	66	58	55	55	50	36
40	3900	0.03	70	65	63	59	57	54	38	72	68	66	62	61	58	41	74	69	67	63	63	61	42	75	70	68	64	65	63	43
	4600	0.04	73	68	66	62	59	55	41	75	71	68	64	63	60	43	77	72	70	66	65	63	46	78	73	71	67	67	64	47
	5300	0.06	75	71	68	64	61	56	43	78	73	71	66	65	61	47	79	74	72	68	67	64	48	80	75	73	69	68	66	49
	6000	0.07	77	73	71	66	63	57	47	80	75	73	68	66	62	49	81	76	74	70	68	65	50	82	77	75	71	70	67	51
	6700	0.09	79	75	72	67	64	58	48	82	77	75	70	68	63	51	83	78	76	71	70	66	52	84	79	77	72	71	68	53

- Radiated sound is the noise transmitted through the unit casing
- Min ΔPs is the static pressure drop from the unit inlet to the unit outlet with primary damper full open
- Sound power levels are in dB, ref 10^{-12} watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI certified. See page M23 for AHRI Certified Performance Listings.
- Sound performance for seismic and valve package configurations are equal to the above

PESV, AESV, DESV / DISCHARGE SOUND PERFORMANCE

Size	CFM	Min ΔPs	Octave Band Sound Power, Lw																										
			0.5" ΔPs							1.0" ΔPs							1.5" ΔPs							2.0" ΔPs						
			2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
4	100	0.02	70	56	47	42	40	33	**28**	71	59	51	46	47	41	**29**	72	61	54	49	50	46	**30**	73	62	56	51	53	49	**31**
	125	0.03	72	60	50	44	42	35	**30**	73	63	54	49	49	43	**31**	74	64	57	52	52	47	**33**	75	65	59	54	55	51	**34**
	150	0.04	73	63	52	47	44	36	**31**	75	65	57	51	50	44	**34**	76	67	60	54	54	49	**35**	76	68	61	56	57	52	**35**
	175	0.06	75	65	54	48	45	37	**34**	76	68	59	53	51	45	**35**	77	69	62	56	55	50	**36**	78	71	64	58	58	53	**38**
	200	0.08	76	67	56	50	46	38	**35**	77	70	61	55	53	46	**36**	78	72	63	58	56	51	**38**	79	73	65	60	59	54	**39**
5	150	0.01	68	53	47	43	41	34	**25**	70	58	52	47	47	42	**28**	72	60	55	50	51	46	**30**	73	62	58	52	53	49	**31**
	200	0.02	71	57	50	46	43	36	**29**	73	61	56	51	49	44	**31**	75	64	59	53	53	48	**34**	76	66	61	55	55	51	**35**
	250	0.03	73	60	53	49	45	38	**31**	75	65	58	53	51	45	**34**	77	67	61	56	55	50	**36**	78	69	63	58	57	53	**38**
	300	0.04	74	62	55	51	47	39	**29**	77	67	60	55	53	46	**33**	78	70	63	58	56	51	**34**	79	72	66	60	59	54	**35**
	350	0.06	76	64	57	52	48	40	**31**	78	69	62	57	54	47	**34**	80	72	65	60	57	52	**36**	81	74	67	61	60	55	**38**
6	300	0.07	68	60	54	50	45	39	**21**	72	65	59	54	51	46	**26**	75	68	62	57	54	50	**30**	77	70	64	58	56	53	**33**
	350	0.10	69	62	55	52	47	40	**22**	74	67	61	56	52	47	**29**	76	70	64	59	55	51	**31**	78	72	66	60	58	54	**34**
	400	0.13	71	63	57	54	48	41	**25**	75	69	62	58	53	48	**30**	78	72	65	60	57	52	**34**	79	74	67	62	59	55	**35**
	450	0.16	72	65	58	55	49	42	**26**	76	70	64	59	54	49	**31**	79	73	67	62	58	53	**35**	81	76	69	63	60	56	**38**
	500	0.20	73	66	60	56	50	43	**28**	77	72	65	61	55	50	**33**	80	75	68	63	59	54	**36**	82	77	70	65	61	57	**39**
7	450	0.07	71	61	54	51	47	40	**25**	74	66	59	54	51	46	**29**	75	70	61	56	54	49	**30**	77	72	63	58	56	52	**33**
	500	0.09	71	62	55	52	48	40	**25**	74	68	60	56	52	47	**29**	76	71	63	58	55	50	**31**	77	74	64	59	57	53	**34**
	550	0.10	72	64	56	54	49	41	**26**	75	69	61	57	53	48	**30**	76	73	64	59	56	51	**33**	78	75	65	60	58	54	**36**
	600	0.12	72	65	57	55	49	42	**26**	75	70	62	58	54	48	**30**	77	74	64	60	57	52	**34**	78	76	66	61	59	55	**37**
	650	0.15	72	66	58	56	50	43	**26**	75	72	63	59	55	49	**32**	77	75	65	61	58	53	**36**	79	77	67	62	59	55	**38**
8	600	0.02	73	63	56	52	48	40	**28**	76	69	60	55	52	47	**31**	78	72	62	56	55	51	**34**	79	75	64	57	57	54	**36**
	650	0.02	74	64	57	53	48	41	**29**	77	70	61	56	53	47	**33**	78	73	63	57	55	51	**34**	79	76	65	58	57	54	**37**
	700	0.02	74	65	57	54	49	41	**29**	77	71	61	56	53	48	**33**	79	74	64	58	56	52	**35**	80	77	65	59	58	55	**38**
	750	0.02	75	66	58	54	49	42	**28**	77	72	62	57	54	48	**31**	79	75	64	58	56	52	**34**	80	78	66	60	58	55	**38**
	800	0.03	75	67	58	55	50	42	**28**	78	73	63	58	54	49	**32**	79	76	65	59	57	53	**36**	81	78	67	60	59	56	**38**
9	800	0.04	73	61	57	53	49	43	**25**	76	66	61	57	54	49	**29**	77	69	63	59	57	53	**30**	78	71	65	60	59	56	**31**
	850	0.04	74	62	57	53	49	43	**26**	76	67	61	57	54	50	**29**	78	70	63	59	57	54	**31**	79	72	65	61	59	56	**33**
	900	0.05	74	63	58	54	50	43	**26**	77	68	62	57	55	50	**30**	79	70	64	59	57	54	**33**	80	72	66	61	59	57	**34**
	950	0.06	75	63	58	54	50	44	**28**	78	68	62	58	55	50	**31**	79	71	64	60	58	54	**33**	80	73	66	61	60	57	**34**
	1000	0.06	75	64	59	55	50	44	**28**	78	69	62	58	55	50	**31**	80	72	65	60	58	54	**34**	81	74	66	62	60	57	**35**
10	900	0.01	75	62	58	55	50	44	**28**	77	67	62	59	55	50	**30**	78	70	65	61	58	54	**31**	79	73	67	63	61	57	**33**
	1000	0.01	76	63	59	56	50	44	**29**	78	68	63	60	56	51	**31**	79	71	66	62	59	55	**33**	80	74	68	64	61	57	**34**
	1100	0.01	76	63	59	57	51	45	**29**	79	69	64	61	56	51	**33**	80	72	66	63	60	55	**34**	81	74	68	65	62	58	**35**
	1200	0.01	77	64	60	57	52	45	**30**	79	70	64	61	57	52	**33**	81	73	67	64	60	56	**35**	82	75	69	66	63	59	**36**
	1300	0.01	78	65	61	58	52	46	**31**	80	70	65	62	58	53	**34**	81	74	68	65	61	56	**35**	82	76	69	66	63	59	**36**
12	1200	0.01	73	64	60	55	53	46	**25**	76	69	64	59	57	52	**29**	78	72	66	62	60	56	**31**	79	74	68	64	62	59	**33**
	1400	0.01	74	65	62	56	54	47	**26**	77	71	66	61	59	53	**30**	79	74	68	63	61	57	**33**	80	76	70	65	63	60	**36**
	1600	0.01	75	66	63	57	55	48	**28**	78	72	67	62	59	55	**31**	80	75	69	64	62	58	**34**	81	77	71	66	64	61	**37**
	1800	0.01	76	68	64	58	55	49	**29**	79	73	68	63	60	56	**33**	80	76	71	65	63	59	**36**	81	78	72	67	65	62	**38**
	2000	0.01	76	69	65	59	56	50	**29**	79	74	69	64	61	56	**33**	81	77	72	66	64	60	**37**	82	79	73	68	66	63	**39**
14	1500	0.02	69	57	56	53	50	44	**20**	72	63	56	59	57	53	**24**	74	67	56	62	62	59	**26**	76	69	56	65	65	62	**29**
	1800	0.03	70	59	58	53	50	44	**21**	73	65	58	59	58	53	**25**	75	68	58	63	62	59	**28**	77	71	58	65	65	63	**30**
	2100	0.04	71	60	59	54	51	44	**22**	74	66	59	60	58	54	**26**	76	69	59	63	63	59	**29**	78	72	59	66	66	63	**31**
	2400	0.05	72	61	60	54	51	44	**24**	75	67	60	60	59	54	**28**	77	70	60	64	63	59	**30**	78	73	60	66	66	63	**32**
	2700	0.06	72	62	61	54	51	45	**24**	76	68	61	61	59	54	**29**	78	71	61	64	63	60	**31**	79	74	61	67	66	63	**33**
16	2000	0.02	68	59	57	54	52	45	**19**	71	63	57	58	56	51	**22**	73	66	57	61	59	54	**25**	74	68	57	63	61	57	**26**
	2400	0.02	70	62	59	55	53	46	**21**	73	66	59	60	58	52	**25**	75	68	59	62	61	56	**28**	76	70	59	64	62	58	**29**
	2800	0.03	71	64	61	57	55	48	**22**	75	68	61	61	59	54	**28**	77	70	61	64	62	57	**30**	78	72	61	66	64	60	**31**
	3200	0.04	73	65	63	58	56	49	**25**	76	69	63	62	60	55	**29**	78	72	63	65	63	59	**31**	79	73	63	67	65	61	**33**
	3600	0.05	74	67	65	59	57	50	**26**	77	71	65	63	61	56	**30**	79	73	65	66	64	60	**33**	81	75	65	68	66	62	**35**
40	3900	0.03	76	70	66	62	61	56	**29**	81	75	66	67	67	62	**35**	84	78	66	69	70	66	**39**	86	80	66	71	72	68	**42**
	4600	0.04	77	71	67	63	63	58	**30**	82	77	67	68	68	64	**37**	85	80	67	71	71	67	**40**	88	82	67	73	74	70	**44**
	5300	0.06	79	73	69	65	64	60	**33**	84	78	69	69	70	65	**39**	87	81	69	72	73	69	**43**	89	83	69	74	75	71	**45**
	6000	0.07	80	74	70	66	65	61	**34**	85	79	70	71	71	67	**40**	88	82	70	73	74	70	**44**	90	84	70	75	76	73	**47**
	6700	0.09	81	75	71	67	67	62	**35**	86	80	71	72	72	68	**42**	89	83	71	74	75	71	**45**	91	85	71	76	77	74	**48**

- Discharge sound is the noise emitted from the unit discharge into the downstream ductwork
- Min ΔPs is the static pressure drop from the unit inlet to the unit outlet with primary damper full open
- Sound power levels are in dB, ref 10^{-12} watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI certified. See page M23 for AHRI Certified Performance Listings.
- Sound performance for seismic and valve package configurations are equal to the above