

# PERFORMANCE DATA

## OAP Sound Power Levels - Standard Unit

Unit Size	Filter Type	Air Flow cfm	Sound Power Levels, Lw, dB, re 10 <sup>-12</sup> Watts													
			Radiated Sound Power Levels							Discharge Sound Power Levels						
			Octave Band							Radiated NC	Octave Band					Discharge NC
2	3	4	5	6	7	8	2	3	4	5	6	7	8			
30	MERV 13	100	58	53	52	47	36	28	26	61	54	54	50	45	38	--
		300	60	54	55	51	41	31	30	63	56	57	54	51	45	--
		500	65	59	58	56	46	36	33	68	61	61	60	56	53	21
		700	75	68	63	62	53	43	42	77	71	67	67	64	62	33
		800	76	69	65	63	55	46	43	78	73	69	68	66	64	34
		1000	82	75	68	68	61	51	51	84	79	74	74	72	71	41
30	HEPA	100	59	54	52	46	32	27	26	63	56	56	53	49	42	--
		300	65	59	56	53	38	30	31	68	61	61	59	56	51	21
		500	70	63	59	57	45	37	35	73	67	64	64	61	59	28
		700	73	67	62	61	51	45	39	77	72	69	70	67	65	33
		800	75	69	64	63	54	47	41	79	74	71	71	70	68	36

**Performance Notes:**

1. Test data obtained in accordance with AHRI Standard 880-2008 and ASHRAE Standard 130-2015.
2. Sound Power Levels expressed in decibels (dB) re 10<sup>-12</sup> watts.
3. Data is raw without any corrections for room absorption, duct attenuation, or ceiling transmission loss.
4. Fan external static pressure is 0.25 in. w.g. [63 Pa] in all cases.
5. NC values are calculated based on typical attenuation values outlined in Appendix E, 2002 Addendum to AHRI Standard 885-2008, "A Procedure for Estimating Occupied Space Sound Levels in the Application of air Terminals and Air Outlets".

6. **Radiated NC** is based on a mineral fiber tile ceiling and the environmental effect. The radiated attenuation deductions are as follows:

Radiated Attenuation	Octave Band					
	2	3	4	5	6	7
<b>Total Deductions</b>	18	19	20	26	31	36

7. **Discharge NC** is based on the environmental effect, duct lining effect, end reflection, flex duct effect and sound power division. The total discharge attenuation deductions are as follows:

Discharge Attenuation	Octave Band					
	2	3	4	5	6	7
<b>&lt; 300</b>	24	28	39	53	59	40
<b>300-700 cfm</b>	27	29	40	51	53	39
<b>&gt; 700 cfm</b>	29	30	41	51	52	39

8. Blanks "--" indicate NCs less than 20.