



QAS™ Flex Duct

Acoustical Flexible Air Duct



QAS Acoustical Flex Duct from Quietflex reduces the overall noise associated with your system. By reducing the noise transmitted through the duct from the HVAC unit, along with the noise generated by the air flow, QAS Acoustical Flex Duct reduces the noise coming out of the register. The key technology is the perforated inner core, which allows the noise to be absorbed by the thermal insulation.

SERIES 120 R6 ACOUSTIC PERFORMANCE

ACOUSTICAL PROPERTIES OF ACOUSTIC FLEX DUCT IN STRAIGHT POSITION

INSERTION LOSS (DB) IN FORWARD FLOW CONDITIONS FOR 10 FEET LENGTH									
Model #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" DIAMETER FLEX	0 FPM	21	32	38	42	43	46	48	38
	400 FPM	22	33	39	42	43	46	48	41
	1000 FPM	21	32	39	42	42	47	48	44
	2000 FPM	12	>30	>31	>39	>43	>46	>48	>47
	2500 FPM	>18	>29	>26	>34	>36	>39	>43	>40
	3000 FPM	>15	>26	>21	>29	>32	>35	>39	>34
8" DIAMETER FLEX	0 FPM	19	32	35	39	42	46	37	28
	400 FPM	20	32	36	39	42	46	38	29
	1000 FPM	19	31	36	39	42	46	39	30
	2000 FPM	18	31	>35	>39	>42	>46	40	33
	2500 FPM	17	>30	>30	>33	>35	>38	>40	34
	3000 FPM	16	>28	>26	>29	>31	>34	>38	>37
12" DIAMETER FLEX	0 FPM	22	36	32	29	37	41	27	25
	400 FPM	23	36	32	29	37	42	27	25
	1000 FPM	23	36	31	29	37	42	28	26
	2000 FPM	22	>36	>32	30	37	43	29	28
	2500 FPM	21	>36	>29	30	38	44	30	30
	3000 FPM	>19	>33	>27	>30	>38	>44	30	31

Note: Insertion loss data denoted with a (>) sign has been corrected to take into consideration the effect of the generated sound pressure level approaching the sound pressure level obtained during the insertion loss portion of the test. In some cases, the insertion loss may be higher than shown.

RADIATED NOISE REDUCTION FOR 10 FT LENGTH									
Model #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" Diameter Flex	0 FPM	2	3	4	6	7	8	12	16
	2500 FPM	4	5	6	7	7	7	11	16
8" Diameter Flex	0 FPM	4	3	5	7	8	10	12	18
	2500 FPM	3	3	6	7	8	10	12	18
12" Diameter Flex	0 FPM	3	3	3	5	5	7	10	15
	2500 FPM	3	4	4	6	5	7	10	15

AIRFLOW GENERATED SOUND POWER LEVEL (DB RE: 10 ⁻¹² W) FWD FLOW CONDITIONS FOR 10 FT LENGTH									
Model #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" Diameter Flex	400 FPM	67*	52*	39*	28*	22*	17*	19*	21*
	1000 FPM	67*	52*	42*	31	25*	19*	19*	21*
	2000 FPM	77	63	57	48	42	37	34	30
	2500 FPM	82	69	63	53	48	42	41	40
	3000 FPM	85	75	68	59	53	47	45	46
8" Diameter Flex	400 FPM	65*	49*	38*	25*	24*	20*	18*	21*
	1000 FPM	65*	49*	42*	37	28*	19*	19*	21*
	2000 FPM	67*	55	54	51	46	40	32	23*
	2500 FPM	71	60	59	56	52	46	41	33
	3000 FPM	75	65	63	60	57	52	47	41
12" Diameter Flex	400 FPM	61*	46*	35*	25*	20*	17*	18*	21*
	1000 FPM	60*	47*	37*	25*	21*	18*	19*	21*
	2000 FPM	65	54	53	43	38	34	33	27
	2500 FPM	71	60	59	50	45	41	41	39
	3000 FPM	75	65	63	56	50	46	46	46

Note: Sound power level data denoted with an asterisk (*) has reached ambient levels in the test room or is determined by instrument limitations. Actual levels are less than or equal to the levels indicated. This data was derived by testing in accordance with ASTM E477 and the ADC test Code FD 72-R1.



FLEX DUCT PRODUCT:

QAS ACOUSTICAL FLEX DUCT

SERIES 125 R8 ACOUSTIC PERFORMANCE ACOUSTICAL PROPERTIES OF ACOUSTIC FLEX DUCT IN STRAIGHT POSITION

INSERTION LOSS (DB) IN FORWARD FLOW CONDITIONS FOR 10 FEET LENGTH									
MODEL #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" Diameter Flex	0 FPM	12	30	36	41	43	47	48	41
	400 FPM	12	30	37	42	43	47	49	>42
	1000 FPM	12	30	37	42	43	47	49	>45
	2000 FPM	12	>30	>36	>38	>39	>43	>50	>45
	2500 FPM	>11	>28	>29	>33	>33	>38	>46	>42
	3000 FPM	>10	>27	>26	>28	>28	>33	>40	>37
8" Diameter Flex	0 FPM	17	30	35	43	41	44	38	32
	400 FPM	18	30	35	43	41	44	38	32
	1000 FPM	17	30	35	43	41	44	40	34
	2000 FPM	16	31	>35	>39	>41	44	42	39
	2500 FPM	16	>30	>34	>34	>39	>43	>43	>42
	3000 FPM	>15	>28	>29	>30	>33	>38	>41	>35
12" Diameter Flex	0 FPM	22	28	26	32	37	37	28	28
	400 FPM	22	28	26	32	37	38	30	29
	1000 FPM	21	28	25	32	37	38	31	31
	2000 FPM	>18	28	27	32	37	39	32	35
	2500 FPM	>15	>28	27	>32	37	39	33	>37
	3000 FPM	>13	>24	>27	>27	>35	>40	>34	>33

Note: Insertion loss data denoted with a (>) sign has been corrected to take into consideration the effect of the generated sound pressure level approaching the sound pressure level obtained during the insertion loss portion of the test. In some cases, the insertion loss may be higher than shown.

RADIATED NOISE REDUCTION FOR 10 FT LENGTH									
MODEL #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" Diameter Flex	0 FPM	1	2	3	5	8	10	12	17
	2500 FPM	2	4	5	6	8	10	12	17
8" Diameter Flex	0 FPM	2	2	3	5	7	8	12	17
	2500 FPM	3	2	4	5	7	9	11	17
12" Diameter Flex	0 FPM	1	2	3	4	6	8	11	17
	2500 FPM	2	4	4	5	6	8	11	17

AIRFLOW GENERATED SOUND POWER LEVEL (DB RE: 10 ⁻¹² W) FWD FLOW CONDITIONS FOR 10 FT LENGTH									
Model #	Center Freq (Hz)	63	125	250	500	1000	2000	4000	8000
6" Diameter Flex	400 FPM	66*	49*	37*	25*	20*	16*	20*	24*
	1000 FPM	66*	50*	38*	28*	22*	16*	20*	24*
	2000 FPM	75	63	55	47	42	36	28	24*
	2500 FPM	79	67	60	53	48	42	36	31
	3000 FPM	82	71	64	58	53	47	42	39
8" Diameter Flex	400 FPM	64*	46*	37*	24*	20*	16*	20*	24*
	1000 FPM	64*	47*	37*	28*	21*	17*	20*	24*
	2000 FPM	71	59	52	48	42	35	30	25*
	2500 FPM	76	64	57	54	48	41	38	34
12" Diameter Flex	3000 FPM	81	70	61	59	53	46	44	43
	400 FPM	61*	46*	35*	23*	20*	17*	20*	24*
	1000 FPM	61*	46*	36*	25*	21*	18*	20*	24*
	2000 FPM	77	65	55	48	41	37	38	37
	2500 FPM	83	70	61	55	48	43	44	45
3000 FPM	87	76	66	61	54	49	49	51	

Note: Sound power level data denoted with an asterisk (*) has reached ambient levels in the test room or is determined by instrument limitations. Actual levels are less than or equal to the levels indicated. This data was derived by testing in accordance with ASTM E477 and the ADC test Code FD 72-R1.

