



2020 / 2021 Radon Professional's Pull-Out Fan Guide

Fan Selection Specifications and Guidelines

With Fan Replacement Guide

This handy 4-page guide is intended to make it easier for you to have RadonAway® fan specifications and our fan replacement chart at your fingertips where you need them, when you need them – on a job site, in your truck, at your desk, or anywhere else you might want to quickly check for fan specs or replacements.

As always, we are committed to providing you with not only the highest quality radon mitigation products but also information to help you provide expert, effective professional radon services.

To remove this guide, firmly hold this 4-page section, then fold back the rest of the catalog and gently pull the guide from the staples.





RP Pro Series

Use RP fans for quiet operation, energy efficiency and high air flow in porous sub-slab or sub-membrane materials consisting of about 4 inches of clean, size 4-6 gravel.



XP/XR Pro Series

Use XP/XR fans for compact size, lower pressure and average flow in very porous sub-slab/membrane materials consisting of 4 inches of clean, size 4-6 gravel.



LV175

The LV175 Low Voltage Radon Fan includes a power pack and cord for connecting to up to 120v AC power. No additional electrical work is required.



GX4

The GX4 is powerful, capable of operating at 4". It will get the job done when conditions call for power, reliability and quiet operation.



GP Pro Series

Use GP fans for versatility and a broad performance range in moderate to tight sub-slab/sub-membrane conditions. Ideal choice when multiple suction points are necessary.



SF180

Use the SF180 for its low-profile design and moderate to good air flow in porous sub-slab or sub-membrane conditions ranging from about 4 inches of 4-6 gravel to very loose soil.



GP500 Series

Use the GP500 in situations that require a high-performance box fan as an alternative to inline tube fans. It can provide coverage up to 1000 square feet per slab penetration.



HS Series

Use HS fans in sand, clay or tight soil conditions when you need up to 25 times the suction of inline radon fans.

MODEL	P/N	FAN DUCT DIAMETER	RRNC 2.0 RADON FAN TYPE	WATTS	RECOM. MAX OP. PRESSURE "WC* Alt. >1,000ft. see NOTE	MAX. PRESSURE "WC	TYPICAL CFM vs. STATIC PRESSURE WC										FAN WEIGHT (lbs)	SHIPPING WEIGHT (lbs)
							0"	.5"	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"			
RP140	28460	4"	RF1	15-21	0.7	0.8	135	70	-	-	-	-	-	-	-	-	3.9	5
RP145	28461	4"	RF1, RF2	41-72	1.7	2.1	166	126	82	41	3	-	-	-	-	-	5.5	7
RP260	28462	6"	-	47-65	1.3	1.4	251	157	70	-	-	-	-	-	-	-	5.6	8
RP265	28463	6"	-	95-139	2.3	2.4	375	282	204	140	70	-	-	-	-	-	6.5	9
RP380	28464	8"	-	96-138	2.0	2.3	531	415	268	139	41	-	-	-	-	-	9.1	12
XP151	28469	4"	RF1, RF2	53-70	1.4	1.5	167	127	77	-	-	-	-	-	-	-	4.9	6
XP201	28470	4"	RF1	38-74	1.6	1.7	126	98	66	26	-	-	-	-	-	-	5	6
XR261	23019-1	6"	-	67-117	1.6	1.7	217	149	87	27	-	-	-	-	-	-	5.7	8
LV175	28537	4"	RF1, RF2	35-75	1.9	2.0	187	162	132	97	12	-	-	-	-	-	-	-
GX3	28584	3"	-	60-135	3.3	3.5	-	-	-	86	72	57	40	-	-	-	7.1	10
GX4	28585	3"	-	70-170	4.0	4.3	-	-	-	-	71	59	45	20	-	-	7.1	10
GX5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GP201	28465	3"	-	31-67	1.8	2.1	-	-	54	42	-	-	-	-	-	-	9.1	11
GP301	28466	3"	-	56-100	2.3	2.5	-	-	64	54	41	-	-	-	-	-	9.8	12
GP401	28467	3"	-	62-128	3.0	3.2	-	-	-	61	52	44	22	-	-	-	10	12
GP501	28468	3"	-	68-146	3.8	4.1	-	-	-	-	66	58	50	27	-	-	10	12
SF180	28317	3" or 4"	-	53-71	1.7	2.1	149	127	96	61	-	-	-	-	-	-	12.8	15
GP500	23003-1	3"	-	85-153	3.8	4.0	-	-	-	-	51	45	35	18	-	-	18	20

MODEL	P/N	FAN DUCT DIAMETER	WATTS	RECOM. MAX OP. PRESSURE "WC*	MAX. PRESSURE "WC	TYPICAL CFM vs. STATIC PRESSURE WC						FAN WEIGHT	SHIPPING WEIGHT	
						0"	10"	15"	20"	25"	35"			
With Cord	HS2000	23004-1	3" in / 2" out	153-314	14	16	62	40	23	-	-	-	17	20
	HS3000	23004-2	3" in / 2" out	120-250	21	24	39	30	25	19	-	-	18	21
	HS5000	23004-3	3" in / 2" out	349-381	35	41	43	35	32	28	24	18	18	21
With Switch Box	HS2000E	23004-4	3" in / 2" out	153-314	14	16	62	40	23	-	-	-	17	20
	HS3000E	23004-5	3" in / 2" out	120-250	21	24	39	30	25	19	-	-	18	21
	HS5000E	23004-6	3" in / 2" out	349-381	35	41	43	35	32	28	24	18	18	21

RRNC 2.0 ANSI/AARST Standard

Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses

This chart displays the designated radon fan types recommended in the new standard.

*Radon Fan Types RF1 & RF2 minimum flow and pressure ratings are manufacturer specifications.

PIPE SIZE Nominal (I.D.)	TOTAL FOUNDATION AREA		
	< 1600 sq. feet < 149 sq. meters	1600 to 2500 sq. feet 149 to 232 sq. meters	> 2500 sq. feet > 232 sq. meters
(3 inch) [7.6 cm]	Use Radon Fan Type: RF1 RF1 Minimum rating: * 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Use Radon Fan Type: RF2 RF2 Minimum rating: * 75 cfm @ 1.0" WC [127m³/hr @ 250 Pa]	Radon fan to be sized by a certified/licensed radon mitigator.
(4 inch) [10 cm]	Use Radon Fan Type: RF1 RF1 Minimum rating: * 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Use Radon Fan Type: RF1 RF1 Minimum rating: * 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Radon fan to be sized by a certified/licensed radon mitigator.

*NOTE: This chart is based on airflow through the ducting of the fan. Every time you reduce the duct size, there is a 20% degradation of airflow. Airflow drops 4% every 1000 feet alt. You can calculate adjusted recommended maximum operating pressure based on the following formula:

$$\left(\text{Recommended Fan Operating Pressure} \right) - \left(\text{Recommended Fan Operating Pressure} \times \frac{\text{Altitude}}{1,000 \text{ ft}} \times 4\% \right) = \text{Actual Maximum Fan Operating Pressure (Adjusted for altitude)}$$

$$\left(3.8'' \text{ Recommended WC} \right) - \left(3.8'' \times \frac{5,280 \text{ ft}}{1,000 \text{ ft}} \times 4\% \right) = 3.0'' \text{ Actual WC}$$

Using Denver, CO as an example, RP145 actual WC reduces to 1.3, and RP265 reduces to 1.7 at 5,280 ft.

RRNC

RADONAWAY FANS SUITABLE AS DESIGNATED BY RRNC 2.0 STANDARD

MODEL	FAN DUCT DIAM.	WATTS	RECOM. MAX. OP. PRESSURE "WC	TYPICAL CFM vs. STATIC PRESSURE WC				RRNC 2.0 Radon Fan Type
				0"	0.5"	1.0"	1.5"	
RP140	4"	15-21	0.7	135	70	-	-	RF1
RP145	4"	41-72	1.7	166	126	82	41	RF1, RF2
XP151	4"	53-70	1.4	167	127	77	-	RF1, RF2
XP201	4"	38-74	1.6	126	98	66	26	RF1
LV175	4"	35-75	1.9	187	162	132	97	RF1, RF2

RadonAway® Replacement Fans		
ORIGINALLY INSTALLED FAN	RadonAway® REPLACEMENT FAN	
Fantech	R100, F100, FR100, HP2133, Rn1	RP140 or LV175
	R150, F150, FR150, Rn3	XR261 or RP260
	R160, F160, FR160	RP260 or RP265
	R175, F175, FR175	RP265
	HP190, HP2190, Rn2	RP145 or LV175
	HP190SL, Rn2SL	SF180
	HP220	RP265
AMG/FESTA	Maverick	RP145, XP151, XP201, or LV175
	Hawk	RP260 or XR261
	Prowler	GP301
	Legend	RP265
	Eagle	GP401
	Goliath	RP260 or GP501**
	Force	RP260 or GP501**
Kanalfakt/ FanAmerica	T1 Turbo 5 (Fiberglass)	XP201*, XP151*, or LV175
	T2 Turbo 6 (Fiberglass)	XR261 or RP260
	K4 (Metal Kanalfakt)	RP140* or LV175
	K4XL (Metal Kanalfakt)	XP201*, XP151*, or LV175
	K6 (Metal Kanalfakt)	XR261 or RP260
Rosenberg	R100	RP140* or LV175
	R150	XR261 or RP260

* Slightly different duct diameter requires different flexible couplings. ** Depends on site needs: Airflow vs. static pressure