Report. hw. 314084.
2006-08-28. SDS_
Conrad_to_DEC

CONRAD GEOSCIENCE CORP.
Environmental Scientists
www.conradgeo.com
8 Raymond Avenue, Poughkeepsie, New York 12603 • 845/454-2544 • fax: 845/454-2655

August 28, 2006

Michael MacCabe, P.E.
New York State Dept. of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7015

Re: Apple Valley Shopping Center Site, LaGrange, NY;
NYSDEC Site #314084;
Conrad Geoscience File #AL030070

Dear Mr. MacCabe:

During the week of July 17, 2006, Conrad Geoscience Corp. connected the existing sub-slab depressurization system at Absolute Pizza to the bedding material of the pipe connecting the external grease trap to the pizza kitchen. Prior to its connection to the depressurization system fan, the grease trap piping represented a potential vapor pathway into the pizza shop. On August 7, 2006, Conrad Geoscience collected samples of sub-slab vapor, indoor air and ambient outdoor air at Absolute Pizza. Results of the August 7 samples are provided in the attached table, which also includes results for all previous rounds of vapor intrusion monitoring at Absolute Pizza and the other Apple Valley stores.

Sub-slab vapor concentrations at Absolute Pizza have declined significantly since the last rounds of sampling in June and January of this year. Since June 1, 2006, PCE has declined from 119,000 ug/m^3 to 20,800 ug/m^3; TCE has declined from 3,550 ug/m^3 to 643 ug/m^3; and cis-1,2-DEC has declined from 269 ug/m^3 to 34.5 ug/m^3. The indoor air concentrations of PCE and TCE also show a measurable decline.

This reduction in sub-slab vapors since June is attributable to some or all of the following factors: 1) Interception of vapors from the grease trap piping and continued operation of the existing sub-slab depressurization system installed at the PCE source area at Absolute Pizza; 2) A deeper water table achieved by continuous pumping of the four recovery wells; and 3) Removal of VOCs from groundwater via the groundwater recovery and treatment system. We plan to conduct a round of vapor intrusion monitoring during the upcoming heating season to determine whether these reductions are sustained.

Also attached are the items relating to vapor mitigation measures you requested:

- Specifications for the two sub-slab depressurization fans. The Fantech HP220 is in Absolute Pizza and the RadonAway RP265 is in Foodtown.

- Table of diagnostic pressure measurements.

- Figure depicting pressure measurement locations.
- Preliminary HVAC inspection letter from Gerard Associates.

Sincerely,

CONRAD GEOSCIENCE CORP.

John A. Conrad
Senior Hydrogeologist

JAC/bpg

cc: D. Engel
J. Klein
M. Millspaugh
K. Comerford
M. Rivara

Table 1. **Volatile Organic Compounds (VOCs) in Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through August 2006;** Apple Valley Shopping Center, Lagrange, New York; Conrad Geoscience File #AL030070

Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
Foodtown	SVFT-1	1-26-05	2,500	13	ND < 0.82	ND < 0.82
		4-29-05	**1,400**	17	ND < 1.2	ND < 1.2
		6-1-06	48.2	4.14	ND < 7.46	ND < 4.82
	SVFT-2	4-29-05	8.7	ND < 0.71	ND < 0.71	ND < 0.71
		6-1-06	10.7	2.84	ND < 1.11	ND < 0.715
	SVFT-3	4-29-05	86	3.8	ND < 0.70	ND < 0.70
		6-1-06	47.6	**7.07**	ND < 7.46	ND < 4.82
	SVFT-4	4-29-05	7,200	210	260	ND < 14
		6-1-06	**386**	ND < 0.771	ND < 14.3	ND < 9.23
	SVFT-5	6-1-06	**354**	**12.2**	ND < 7.46	ND < 4.82
	IAFT-1	1-26-05	**9.7**	ND < 0.97	ND < 0.97	ND < 0.97
		4-29-05	**8.6**	ND < 0.74	ND < 0.74	ND < 0.74
		6-1-06	3.47	**0.267**	ND < 0.393	ND < 0.254
	IAFT-2	6-1-06	3.47	**0.276**	ND < 0.393	ND < 0.254

Notes: All units are ug/m^3 unless otherwise noted;
SV prefix represents sub-slab vapor samples;
Boldface type indicates need for ongoing monitoring or other action, as per attached matrix.
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
E = Exceeds calibration range;

DRAFT

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through August 2006;** Apple Valley Shopping Center, Lagrange, New York; Conrad Geoscience File #AL030070

Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
Absolute Pizza	SVAP-1	1-26-05	**160**	3.6	ND < 0.79	ND < 0.79
		1-17-06	**307,000E**	**8,990E**	277	ND < 1.27
		6-1-06	**119,000E**	**3,550E**	269	ND < 5.07
		8-7-06	**20,800E**	**643E**	34.5	ND < 7.25
	IAAP-1	1-26-05	**26**	ND < 0.84	ND < 0.84	ND < 0.84
		1-17-06	**584E**	7.39	ND < 1.96	ND < 1.27
		6-1-06	**57.1**	**1.38**	ND < 2.49	ND < 1.61
		8-7-06	**44.7**	ND < 4.05	ND < 11.2	ND < 7.25
Soccer Empire	SVSE-1	1-26-05	14	ND < 0.64	ND < 0.64	ND < 0.64
		6-1-06	64.8	8.67	ND < 7.85	ND < 5.07
	IASE-1	1-26-05	ND < 0.69	ND < 0.69	ND < 0.69	ND < 0.69
		6-1-06	1.23	0.248	ND < 0.392	ND < 0.253
Lagrange Pharmacy	SVLP-1	1-26-05	**220**	10	ND < 0.85	ND < 0.85
		1-17-06	**166**	**42.1**	4.67	ND < 1.27
		6-1-06	**235**	**17.0**	ND < 7.85	ND < 5.07
	IALP-1	1-26-05	1.5	ND < 1.5	ND < 1.5	ND < 1.5
		1-17-06	**172**	**4.62**	ND < 1.96	ND < 1.27
		6-1-06	1.18	**0.261**	ND < 0.392	ND < 0.253

Notes: All units are ug/m^3 unless otherwise noted;
SV prefix represents sub-slab vapor samples;
Boldface type indicates need for ongoing monitoring or other action, as per attached matrix.
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
E = Exceeds calibration range;

DRAFT

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through August 2006;** Apple Valley Shopping Center, Lagrange, New York; Conrad Geoscience File #AL030070

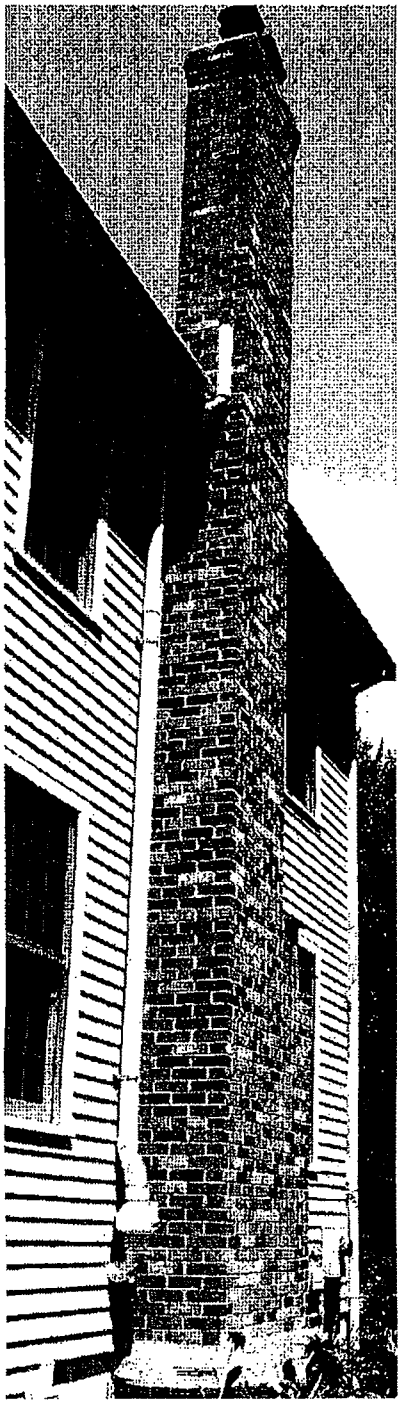
Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
State Farm	SVSF-1	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	ND < 13.4	12.5	ND < 7.85	ND < 5.07
	IASF-1	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	6.77	ND < 0.0212	ND < 0.392	ND < 0.253
Dollar Store	SVDS-1	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	3.82	**9.15**	ND < 1.45	ND < 0.938
	IADS-1	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	0.420	**1.41**	4.87	ND < 0.254
Subway	SVSW-1	11-29-05	3.94	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	ND < 12.7	5.15	ND < 7.46	ND < 4.82
	IASW-1	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
		6-1-06	1.53	ND < 0.221	ND < 0.408	ND < 0.264
Outdoor Air	OA-1	1-26-05	ND < 0.69	ND < 0.69	ND < 0.69	ND < 0.69
	OA-2	4-29-05	ND < 0.72	ND < 0.72	ND < 0.72	ND < 0.72
	OA-3	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
	OA-4	1-17-06	10.5	ND < 2.66	ND < 1.96	ND < 1.27
	OA-5	6-1-06	530	12.4	ND < 7.85	ND < 5.07
	OA-6	8-7-06	1.77	ND < 0.242	ND < 0.671	ND < 0.434

Notes: All units are ug/m^3 unless otherwise noted;
SV prefix represents sub-slab vapor samples;
Boldface type indicates need for ongoing monitoring or other action, as per attached matrix.
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
E = Exceeds calibration range;

DRAFT

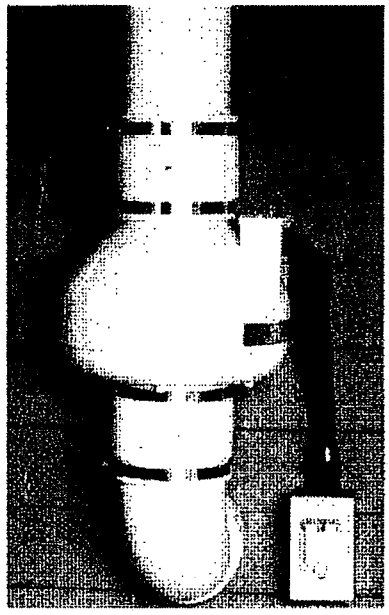
RadonAway™

RP Series

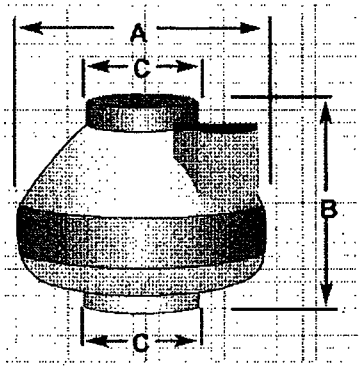


Radon Mitigation Fans

Specially designed for radon mitigation, RP Series Fans provide superb performance, run ultra-quiet and are attractive. They are ideal for most subslab radon mitigation systems.



- 5-Year Warranty
- Quiet and attractive
- Thermally protected
- Motorized impeller
- ETL Listed - for indoor or outdoor use
- Meets all electrical code requirements
- Rated for commercial and residential use



Model	Dimensions		
	A	B	C Duct Size
RP140	9.7"	8.5"	4"
RP145	9.7"	8.5"	4"
RP260	11.75"	8.6"	6"
RP265	11.75"	8.6"	6"

Conforms to UL STD. 507
Cert. to CAN/CSA STD. C22.2 No.113

The following chart shows performance of RP Series fans:

Model	Watts	Maximum Pressure "WC	Typical CFM vs. Static Pressure WC				
			0"	0.5"	1.0"	1.5"	2.0"
RP140	14-20	0.8	134	68	-	-	-
RP145	37-71	2.1	173	132	94	55	11
RP260	52-72	1.8	275	180	105	20	-
RP265	86-140	2.5	327	260	207	139	57

Choice of model is dependent on building characteristics including sub-slab materials and should be made by a radon professional.

For Further Information Contact:

0902
P/N 02008

Fantech

Site Search GO

What's New FAQ Company Info Table of Contents Contact Us Rep Login Dist Login

Improving Indoor Air Quality Through Better Ventilation

Product Lines: ALL PDF

- Inline Duct Fans
- Dryer Booster Fans
- Exterior Fans
- Exhaust Fans
- Axial Fans
- Radon Fans
- TurboFlo Commercial Fans
- Whole House HEPA Filtration
- Heat Recovery Ventilators
- Energy Recovery Ventilators
- Air Curtains
- Grilles & Dampers
- Accessories

Radon Mitigation

Radon brochure for Home Owners in PDF (186 kb)
Radon fan brochure for the Professional in PDF (318 kb)
If you do not have Adobe Acrobat Reader, click here.

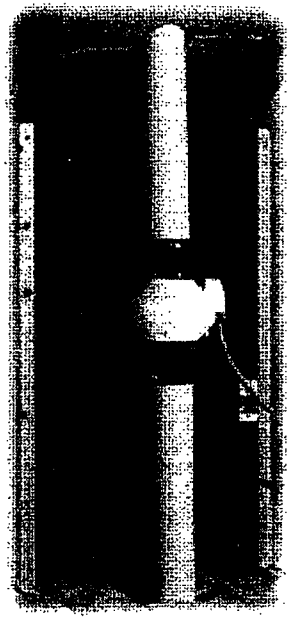
HP Installation Instructions in PDF (204 kb)

It's everywhere

It doesn't need to be in your home

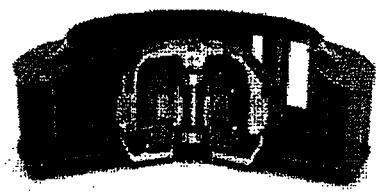
Experts all agree that radon is everywhere. A naturally occurring radioactive gas, Radon in low concentrations is harmless. In todays better insulated homes however, radon can accumulate to harmful levels. Your first step in determining the radon level of your home is to test your home. Test kits can be purchased at a number of locations in your town or city. (If you have difficulty, contact your local EPA office and they will assist you).

Once you have tested your home and find that you have dangerous or elevated amounts of radon present you need to consider radon mitigation. In your selection of a contractor make sure he is offering Fantech radon mitigation fans as part of your solution.

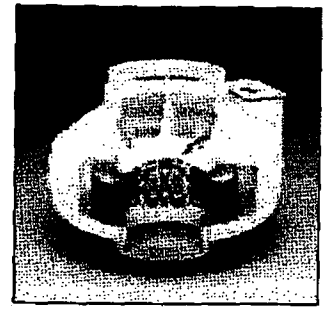


For over 10 years Fantech has manufactured quality mitigation fans for radon applications. With over one million radon installations worldwide and the reputation for establishing new standards of performance and value your contractor has selected the finest fan for your family's protection.

Every Fantech Radon Fan is fully caulked as necessary to ensure optimum performance and durability. All fans are UL rated for outside installations.



Fantech HP 2190



Fantech provides you with independently tested performance specifications. Testing is done in accordance with AMCA Standard 210-85 and HVI 915 test procedures.

Fantech HP Series Fans Provide the Solutions to meet the challenges of Radon applications:

HOUSING

- UV resistant, UL listed durable plastic
- UL Listed for use in commercial applications
- Factory sealed to prevent leakage
- Watertight electrical terminal box
- Approved for mounting in wet locations - i.e. Outdoors

MOTOR

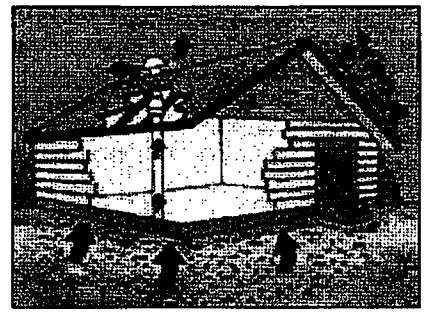
- Totally enclosed for protection
- High efficiency EBM motorized impeller
- Automatic reset thermal overload protection
- Average life expectancy of 7-10 years under continuous load conditions

RELIABILITY

- Five Year Full Factory Warranty
- Over 1,000,000 successful radon installations worldwide

HP Series Fans are specially

designed with higher pressure capabilities for Radon Mitigation applications



Fantech has developed the HP Series fans specifically to suit the higher pressure capability requirements needed in Radon Mitigation applications. Most Radon Mitigators who previously used the Fantech FR Series fans have switched to the new HP Series.

Performance Data

Model	Volts	Wattage Range	Mo	0†	.50†	.75†	1.0†	1.25†	1.5†	1.25†	1.5†	Max. Pres.
HP 2133	115	14-20	0.17	134	68	19	-	-	-	-	-	0.84†
HP 2190	115	60-85	0.78	163	126	104	81	58	35	15	-	1.93†
HP 175	115	44-65	0.57	151	112	91	70	40	12	-	-	1.66†
HP 190	115	60-85	0.78	157	123	106	89	67	45	18	1	2.01†
HP 220	115	85-152	1.30	344	260	226	193	166	137	102	58	2.46†

= CFM @

HP installation instructions in PDF (191 kb)
If you do not have Adobe Acrobat Reader, click here.

HP FEATURES INCLUDE

- Improved UV resistant housings approved for commercial applications.
- UL Approved for Wet Locations (Outdoors)
- Sealed housings and wiring boxes to prevent Radon leakage or water penetration
- Energy efficient permanent split capacitor motors
- External wiring box
- Full Three Year Factory Warranty HP Series Fans are specially designed with higher pressure capabilities for Radon Mitigation applications

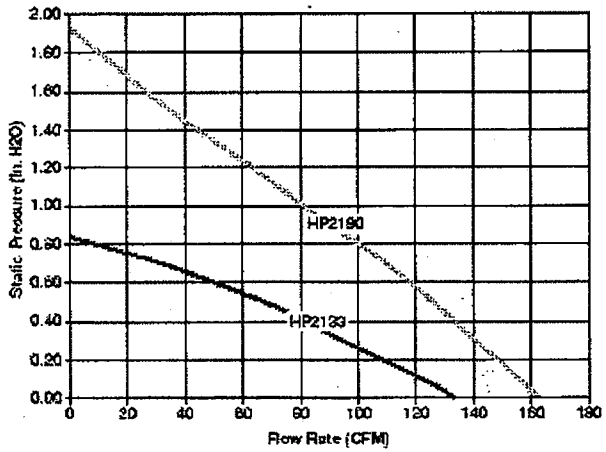
Performance Curves

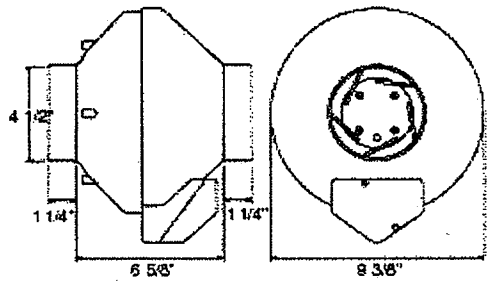
Fantech provides you with independentiy tested performance specifications.

The performance curves shown in this brochure are representative of the actual test results recorded at Texas Engineering Experiment Station/Energy Systems Lab, a recognized testing authority for HVI. Testing was done in accordance with AMCA Standard 210-85 and HVI 915 Test Procedures. Performance graphs show air flow vs. static pressure.

Use of HP Series fans in low resistance applications such as bathroom venting will result in elevated sound levels. We suggest FR Series or other Fantech fans for such applications.

HP2133 and 2190 Radon Mitigation Fans



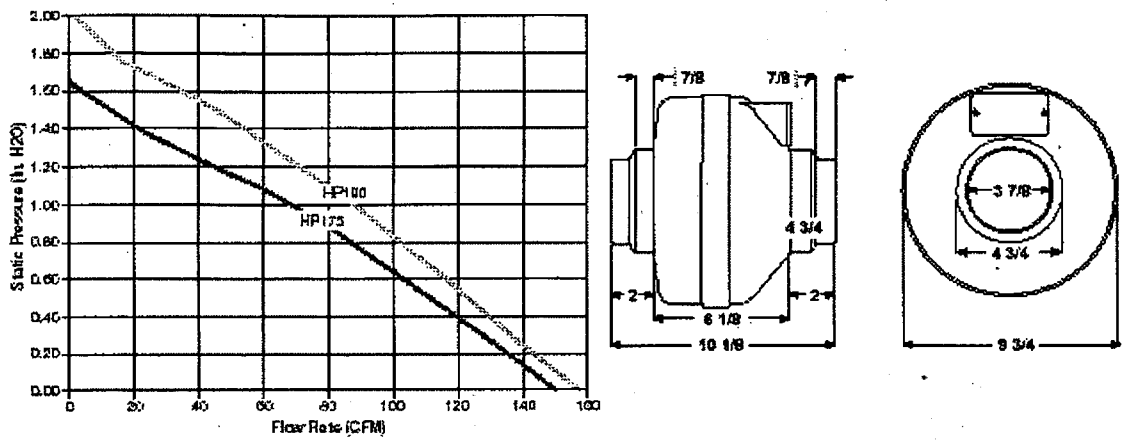


Tested with 4" ID duct and standard couplings.

HP2133 – For applications where lower pressure and flow are needed. Record low power consumption of 14-20 watts! Often used where there is good sub slab communication and lower Radon levels.
HP2190 – Performance like the HP190 but in a smaller housing. Performance suitable for the majority of installations.

Fans are attached to PVC pipe using flexible couplings.
For 4" PVC pipe use Indiana Seals #156-44, Pipeconx PCX 56-44 or equivalent.
For 3" PVC pipe use Indiana Seals #156-43, Pipeconx PCX 56-43 or equivalent.

HP175 and HP190 Radon Mitigation Fans

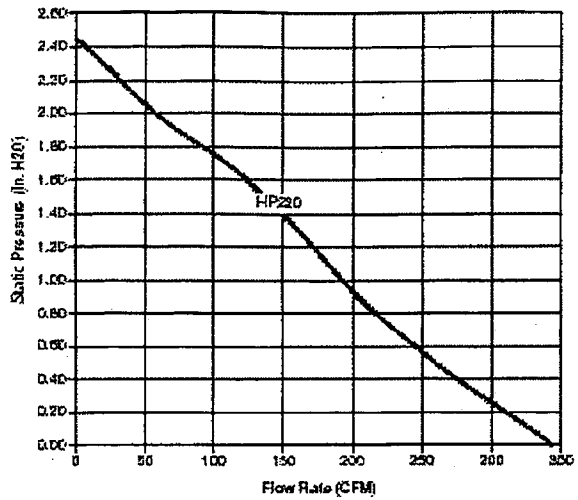


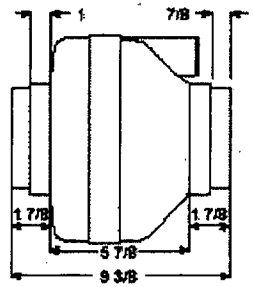
Tested with 4" ID duct and standard couplings.

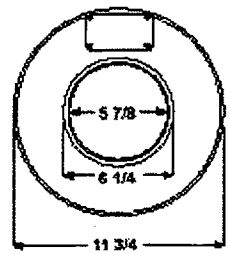
HP175 – The economical choice where slightly less air flow is needed. Often used where there is good sub slab communication and lower Radon levels.
HP190 – The standard for Radon Mitigation. Ideally tailored performance curve for a vast majority of your mitigations.

Fans are attached to PVC pipe using flexible couplings.
For 4" PVC pipe use Indiana Seals #151-44, Pipeconx PCX 51-44 or equivalent.
For 3" PVC pipe use Indiana Seals #156-43, Pipeconx PCX 56-43 or equivalent.

HP220 Radon Mitigation Fan







Tested with 6" ID duct and standard couplings.

HP 220 – Excellent choice for systems with elevated radon levels, poor communication, multiple suction points and large subslab footprint. Replaces FR 175.

Fans are attached to PVC pipe using flexible couplings.
For 4" PVC pipe use Indiana Seals #156-64, Pipeconx PCX 56-64 or equivalent.
For 3" PVC pipe use Indiana Seals #156-63, Pipeconx PCX 56-63 or equivalent.

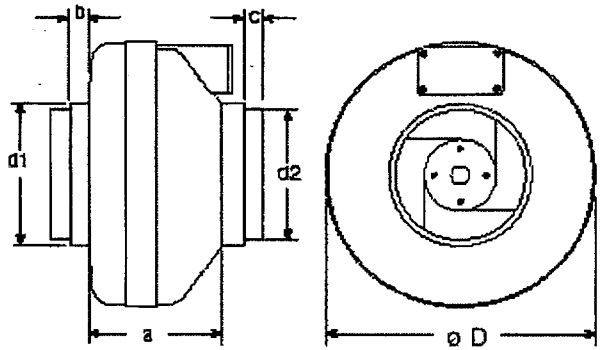
The Original Mitigator – Fantech's FR Series Fans

All dimensions in inches.

Dimensional Data

Model	D	d1	d2	a	b	c
FR100	9 1/2	3 7/8	4 7/8	6 1/8	7/8	7/8
FR110	9 1/2	3 7/8	4 7/8	6 1/8	7/8	7/8
FR125	9 1/2	-	4 7/8	6 1/8	7/8	-
FR140	11 3/4	5 7/8	6 1/4	5 7/8	1	7/8
FR150	11 3/4	5 7/8	6 1/4	5 7/8	1	7/8
FR160	11 3/4	5 7/8	6 1/4	6 3/8	1	7/8
FR200	13 1/4	7 7/8	9 7/8	6 1/4	1 1/2	1 1/2
FR225	13 1/4	7 7/8	9 7/8	6 1/4	1 1/2	1 1/2

FR250	13 1/4	-	9 7/8	6 1/4	-	1 1/2



Performance Data

Fan Model	Energy. Star	RPM	Volts	Rated. Watts	Wattage. Range	Max. Amps	0"	.2"	.4"	.6"	.8"	1.0"	1.5"	Max. Ps	Duct Dia.
FR100	V	2900	115	19	13-19	0.18	122	100	78	55	15	-	-	0.87"	4"
FR110	-	2900	115	80	62-80	0.72	167	150	133	113	88	63	41	0.60"	4"
FR125	V	2950	115	18	15-18	0.18	148	120	88	47	-	-	-	0.79"	5"
FR140	V	2850	115	61	47-62	0.53	214	190	162	132	99	46	-	0.15"	6"
FR150	V	2750	115	71	54-72	0.67	263	230	198	167	136	106	17	1.58"	6"
FR160	-	2750	115	129	103-130	1.14	289	260	233	206	179	154	89	2.32"	6"
FR200	V	2750	115	122	106-128	1.11	408	360	308	259	213	173	72	2.14"	8"
FR225	V	3100	115	137	111-152	1.35	429	400	366	332	297	260	168	2.48"	8"
FR250	-	2850	115	241	146-248	2.40	649	600	553	506	454	403	294	2.58"	10"

FR Series performance is shown with ducted outlet. Per HVI's Certified Ratings Program, charted air flow performance has been derated by a factor based on actual test results and the certified rate at .2 inches WG.

CFM VS. STATIC PRESSURE

For your peace of mind...

Make sure your contractor uses the best mitigation fan available...

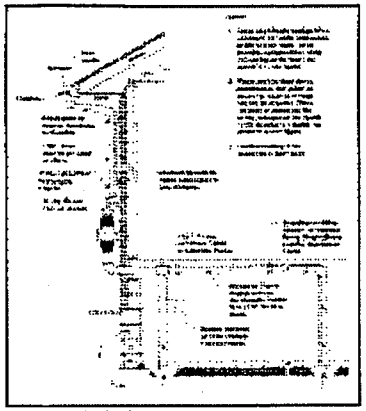
Fantech Radon Fans.

Fantech, Your Contractor and You
The winning team in radon gas mitigation.

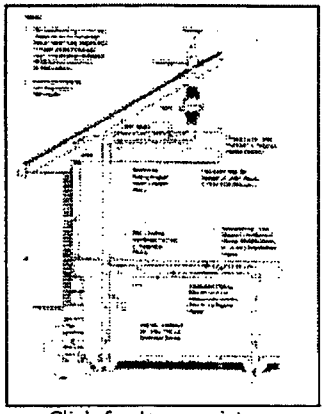
Fantech HP and FR Series fans are the number #1 choice of fans in the world for radon mitigation. If you have any reason to suspect that your home has a Radon level over 4 pCi/L Fantech suggests that you contact a professional mitigator in your area. EPA gives direction for how to locate a qualified Radon professional at http://www.epa.gov/iaq/radon/proficiency.html.

EPA also has a listing of State Radon contacts at http://www.epa.gov/iaq/contacts.html.

FANTECH IS THE #1 CHOICE IN THE WORLD FOR FANS USED IN RADON MITIGATION



Click for larger picture



Click for larger picture

Another good source for Radon information is AARST's (American Association of Radon Scientists and Technologists, Inc.) site, http://www.aarst.org/radon_info.html. It includes valuable information regarding the health risks associated with Radon.

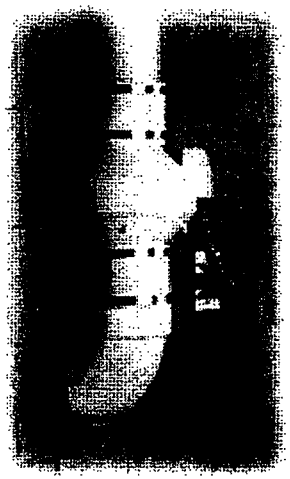
Fantech is a manufacturer of fans for Radon mitigation. Fantech Radon mitigation fans are mainly distributed by our Radon Distributors, who distribute nationwide.
Distributors of Fantech Radon mitigation fans include:

O'Bar Systems
Tel. 1-201-697-0112
Fax 1-201-697-0414
E-mail: gunstr6@aol.com

Professional Discount Supply (www.radonpds.com)
Tel. 1-719-444-0646
Fax 1-719-442-2384
E-mail: pdsjam@att.net

RCI, Radon Control, Inc. (www.radoncontrol.com)
Tel. 1-317-846-7486
Fax 1-317-846-5882
E-mail: radonsuply@aol.com

Radonsupplies NA (www.radonsupplies.com)
Tel. 1-888-800-5955
Tel. 1-908-996-0400 in NJ
Fax 1-908-996-0707
E-mail: sales@radonsupplies.com

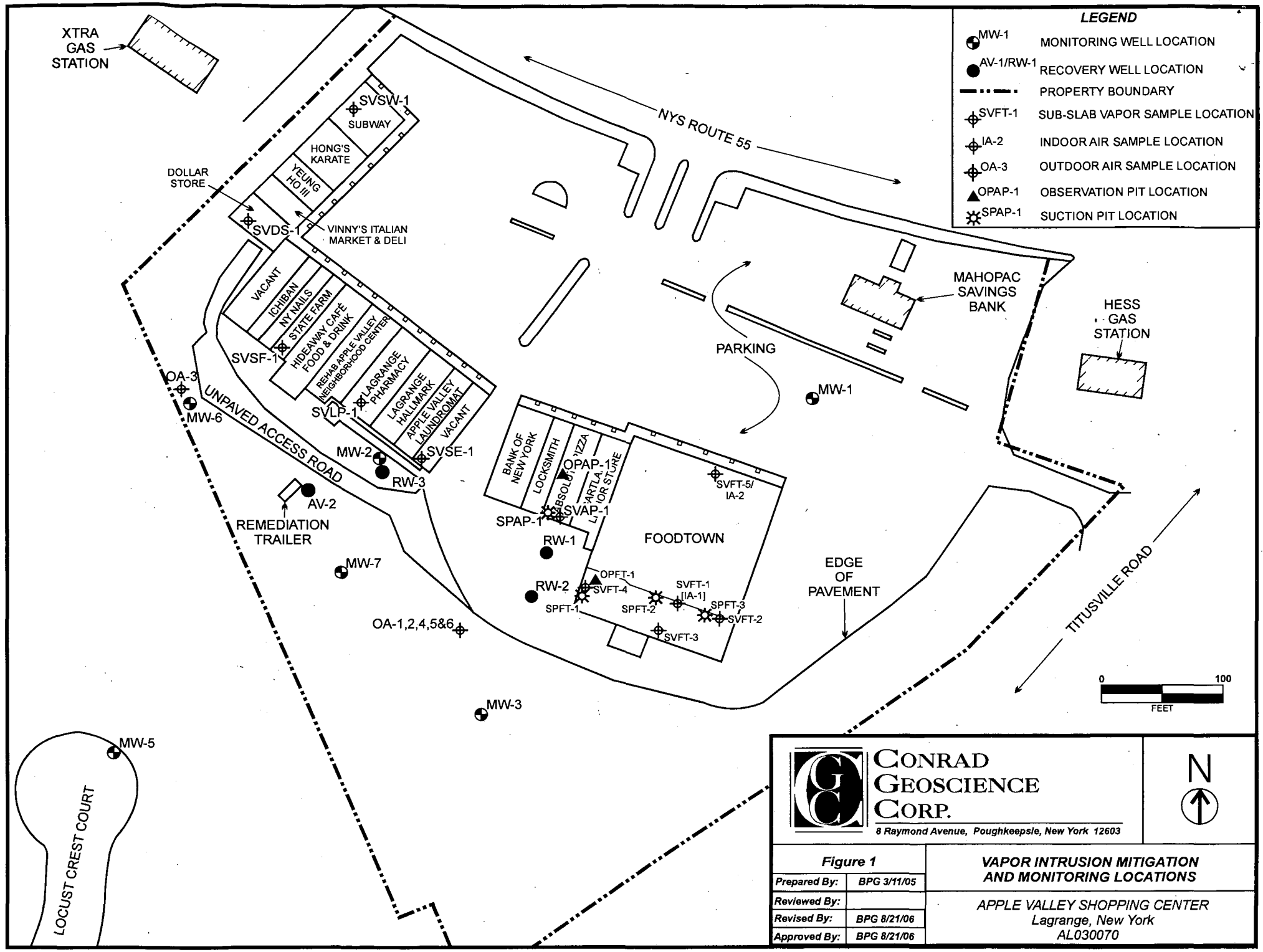


Fantech reserves the right to modify, at any time and without notice, any or all of its products' features, designs, components and specifications, to maintain their technological leadership position.

Table 1. **Differential Pressure Readings from Sub-Slab Depressurization Systems**; collected February 22 and March 1, 2006; Apple Valley Shopping Center, Lagrange, New York
Conrad Geoscience File #AL030070

Sub-Slab Depressurization System Location	Monitoring Location (Distance in Feet to Nearest Suction Pit)	Inches of Water Column		Pascals	
		2-22-06	3-1-06	2-22-06	3-1-06
Absolute Pizza	SVAP-1 (2 feet from SPAP-1)	-0.028	-0.036	-6.9	-8.9
	OBAP-1 (41 feet from SPAP-1)	-0.000	-0.001	-0.0	-0.2
	U-Tube Manometer (0 feet from SPAP-1)	2.5	2.5	N/A	N/A
Foodtown	SVFT-1 (17 feet from SPFT-2)	-0.005	-0.004	-1.2	-1.1
	SVFT-2 (11 feet from SPFT-3)	0.001	0.002	0.2	0.7
	SVFT-3 (28 feet from SPFT-2)	NS	0.000	NS	0.1
	SVFT-4 (6 feet from SPFT-1)	-0.018	-0.018	-4.0	-4.0
	OBFT-1 (21 feet from SPFT-1)	-0.001	-0.000	-0.2	-0.1
	U-Tube Manometer (0 feet from SPFT-1)	1.75	1.75	N/A	N/A

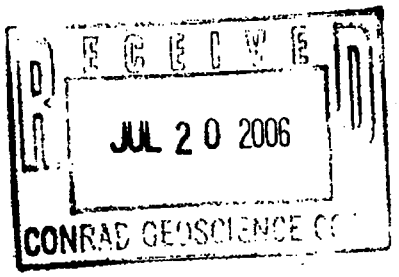
Notes:
NS = Not Sampled;
N/A = Not Applicable.


LEGEND
MW-1 MONITORING WELL LOCATION
AV-1/RW-1 RECOVERY WELL LOCATION
PROPERTY BOUNDARY
SVFT-1 SUB-SLAB VAPOR SAMPLE LOCATION
IA-2 INDOOR AIR SAMPLE LOCATION
OA-3 OUTDOOR AIR SAMPLE LOCATION
OPAP-1 OBSERVATION PIT LOCATION
SPAP-1 SUCTION PIT LOCATION
XTRA GAS STATION
NYS ROUTE 55
SVSW-1
SUBWAY
HONG'S KARATE
YEUNG HO III
DOLLAR STORE
SVDS-1
VINNY'S ITALIAN MARKET & DELI
VACANT
ICHIBAN
NY NAILS
STATE FARM
HIDEAWAY CAFÉ FOOD & DRINK
REHAB APPLE VALLEY NEIGHBORHOOD CENTER
LAGRANGE PHARMACY
LAGRANGE HALLMARK
APPLE VALLEY LAUNDROMAT
VACANT
SVSF-1
SVLP-1
SVSE-1
OA-3
MW-6
UNPAVED ACCESS ROAD
MW-2
RW-3
AV-2
REMEDIATION TRAILER
MW-7
OA-1,2,4,5&6
MW-3
MW-5
LOCUST CREST COURT
PARKING
MW-1
MAHOPAC SAVINGS BANK
HESS GAS STATION
BANK OF NEW YORK
LOCKSMITH
ABSOLUTE PIZZA
CARTLAND LIQUOR STORE
OPAP-1
SVAP-1
SPAP-1
SVFT-5/ IA-2
FOODTOWN
RW-1
RW-2
OPFT-1
SVFT-4
SVFT-1 [IA-1]
SPFT-1
SPFT-2
SPFT-3
SVFT-2
SVFT-3
EDGE OF PAVEMENT
TITUSVILLE ROAD
0
100
FEET
N
CONRAD GEOSCIENCE CORP.
8 Raymond Avenue, Poughkeepsie, New York 12603
Figure 1
VAPOR INTRUSION MITIGATION AND MONITORING LOCATIONS
Prepared By: BPG 3/11/05
Reviewed By:
Revised By: BPG 8/21/06
Approved By: BPG 8/21/06
APPLE VALLEY SHOPPING CENTER
Lagrange, New York
AL030070

GERARD ASSOCIATES
CONSULTING ENGINEERS, P.C.

July 11, 2006

Mr. John A. Conrad
Senior Hydrogeologist
Conrad Geoscience Corp.
8 Raymond Avenue
Poughkeepsie, NY 12603



Re: Apple Valley Plaza
Route 55
Poughkeepsie, NY
Our Project No. 06049

Mr. Conrad:

You retained our company to evaluate some of the existing merchant spaces and the HVAC equipment at the above mentioned site. You were interested in positively pressuring the spaces using the existing HVAC equipment. Some of the merchant spaces were experiencing VOC mitigation problems through the building slab from contaminated soil on the site. By positively pressuring the space you would introduce an excess amount of outdoor air that would exfiltrate through any building openings.

During our field visit on Friday, July 7, 2006 we surveyed some of the merchant spaces and HVAC equipment. The merchant spaces are diverse occupancies ranging from retail, business and food service. Each merchant space has its own HVAC equipment with varied ventilation and exhaust requirements.

Each merchant space would require a detailed investigation to determine if the existing HVAC equipment is large enough to handle additional ventilation air or whether new equipment would be required.

Please call if you have any questions.

Sincerely,

John Trombino, P.E.

110 CRYSTAL RUN ROAD
MIDDLETOWN, NY 10941
TEL: (845)695-1272
FAX: (845)695-1692

info@GerardAssociates.com