

October 30, 2025

Mr. Matthew Hubicki

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Re: Corrective Measure Work Plan
FORMER SWIVELIER SITE
33 Route 304, Nanuet, Rockland County, NY
Voluntary Cleanup Program (VCP) Site No. V-00520-3, Haz Waste Site Code: 344036

Dear Mr. Hubicki:

This Corrective Measure Work Plan (CMWP) was prepared by Bellucci Engineering PLLC (BE) on behalf of SF Properties, LLC for the Site located at 33 Route 304, Nanuet, Rockland County, New York. The Site is identified by the New York State Department of Environmental Conservation (NYSDEC) as Voluntary Cleanup Program (VCP) Site No. V-00520-3 and Hazardous Waste Site Code # 344036 (herein the Site). This CMWP addresses deficiencies associated with two existing sub-slab depressurization systems (SSDs) which were installed at the Site in March 2008 under the oversight of the NYSDEC and EMWA Engineering.

Background

An SSDS was installed at the Site in March 2008 under the oversight of the NYSDEC and EWMA Engineering Services, LLC to address concerns regarding a potential source of vapor intrusion beneath the building. Two (2) separate SSDSs are installed along the western and eastern portions of the building and connected to vacuum blower #1 and #2, respectively, which are located on the roof of the building. Each SSDS consists of a 4-inch PVC main header pipe installed along the ceiling and is connected to a total of seventeen (17) extraction points. The manifolded extraction points are routed outside of the building through the roof and into the two existing vacuum blowers. A total of nine (9) extraction points are connected to the western SSDS (Historically referenced as "Blower #1") and eight (8) extraction points are connected to the eastern SSDS (Historically referenced as "Blower #2"). The extraction wells are 2-inch PVC pipes extending upwards from the extraction points along the walls and corner and along the ceiling to the 4-inch PVC main header pipes. Extraction point connector pipes and main header inlets to the vacuum blowers are reportedly equipped with ball valves and sampling ports in order to optimize the vacuum and flow through all points, and collect flow readings and air samples, as necessary. According to historic reporting, the installed vacuum blowers are 7.5HP Rotron/ Baldor Regenerative Blowers capable of providing a total flow rate of 250 to 300 cubic feet per minute (CFM).

The property owner retained Bellucci Engineering, PLLC, to perform an inspection of the existing SSDS(s) operating at the Site. The inspection was performed by Mr. Daniel Bellucci, (P.E. # 099470) on September 26, 2025. During the inspection, Blower #2 was observed to be not operational. Blower # 1 was operating at an approximate vacuum of 48 inches of water column (in-WC). The sheet metal enclosure surrounding Blower # 1 has been compromised and is no longer providing shelter to the existing blower. The sheet metal enclosure for Blower #1 was generally intact.

Extraction points were observed in the ground floor tenant spaces in locations as depicted on historic site figures. A photographic log from the site inspection is included as Attachment A.

Placards on the two existing blowers indicate the blowers are identical models with the following specifications:

- Make: Baldor
- Cat No: 61210B
- Spec: 37F133X623
- Horse Power: 10 @ 60 HZ (8 HP at 50 HZ/ European)
- Volts: 208-230/ 460
- Amps: 35-29.5/ 15
- Phase: 3

As noted above, the existing blowers are reportedly capable of creating air flow ranging from 250-300 CFM according to prior reports prepared on the systems. The existing blowers are likely to be nearing the end of their useful life, as evidenced by the apparent failure of Blower # 2. The Site Owner retained Bellucci Engineering to replace the existing SSDS blowers and necessary system components with new, modern blowers. Ownership also requested the Remedial Engineer consider energy efficient blower replacement options to reduce overall electrical consumption while still maintaining necessary air flow to prevent soil vapor intrusion (SVI) at the Site. The intent to reduce the power consumption is in conformance with the NYSDEC goals stated of the DER-31 Green Remediation Program Policy (Revised January 20, 2011).

A copy of the NYSDEC *Mitigation System Installation Record* form for the existing systems is included in Attachment B. This form will be updated with the specifications for new blowers (discussed herein) once the CMWP is approved and the replacement blowers have been installed.

Proposed Corrective-Measures

The Remedial Engineer, in consultation EnviroEquipment, Inc., a company specializing in custom design and fabrication of remedial and mitigation systems, recommend 6.5 hP Republic HRC 750 regenerative blowers to replace the existing Baldor units. These blowers will be installed within custom fabricated skids set atop rooftop mount supports. The two existing SSDS blowers and associated piping, filters, gauges and enclosure will be removed from the rooftop prior to installation of the new blowers. The existing SSDS headers will be connected to the two new SSDS blower skids constructed of primed/ painted of 2-inch angle iron over/ under layout. The SSDS skids will be placed atop rubber block roof supports. The SSDS skids will consist of the following equipment:

- Republic HRC 750 6.5 HP;
- CT-235P-300C Solberg 3" Inlet Filter - T Style;
- FS-31P-200 2" Solberg Filter Silencer;
- 2" Vacuum Relief Valve Set for 7" HG;
- 2.5" VACUUM GAUGE; 0-100" WC / 0-8" HG;
- Differential pressure switch, range 4.0-20.0" w.c.;
- 3" Galvanized SVE Exhaust Piping with Silencer;
- 3" Galvanized & SCH 80 PVC SVE Vacuum Piping from Blower to Air;
- Filter with Vacuum Gauge and Tee with 2" Brass Gate Valve and Dilution Valve, Tee with 2" Vacuum Relief Valve;

- 3" SCH 80 PVC Vacuum Piping On Air Filter Inlet with Vacuum Gauge;
- Electrical Conduit, Wire, Hardware, Etc. for General Industrial Weatherproof Installation of Electrical Components; and
- Over/Under Open Skid Design Made from 2" Angle Iron Primed/Painted.

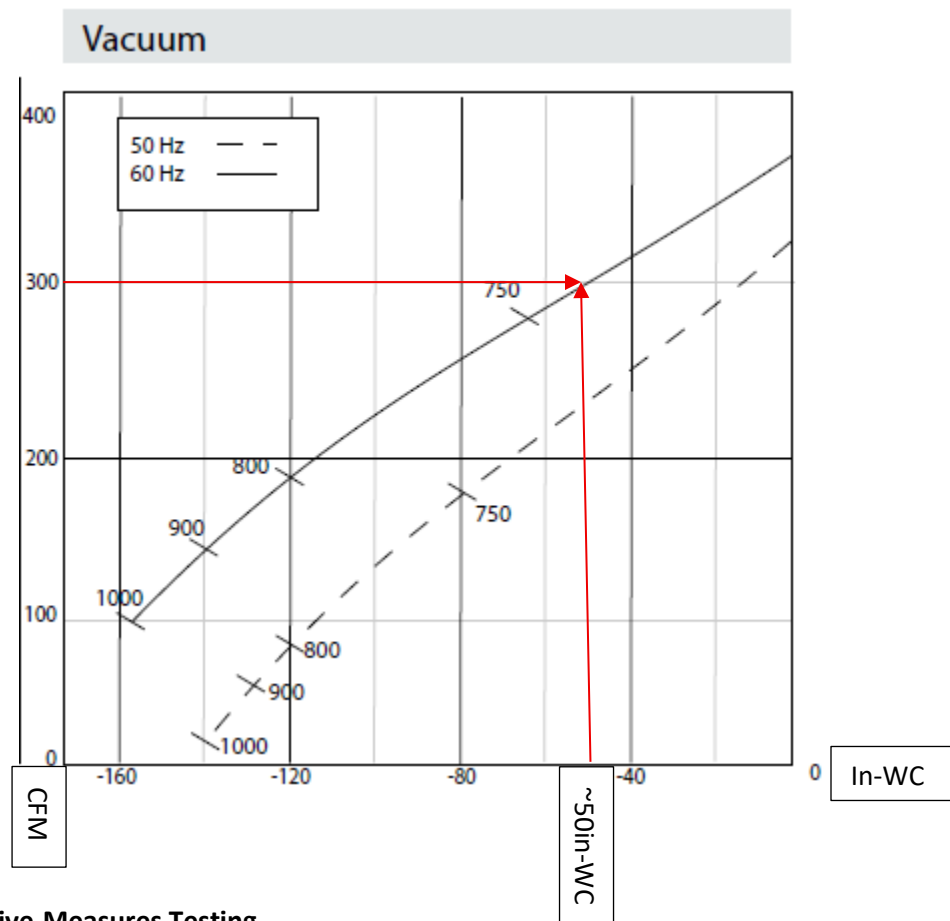
Electrical

The SSDS skids will come factory assembled with control panels (Nema 4 Enclosure with Lockable Dead Front) mounted on the exterior of the SSDS. The blowers will be wired using existing power supply (230V Three phase w/ Neutral Incoming Power).

The SSDS exhaust pipes will be terminated a minimum of 10-feet or more from any HVAC intake, the property line, window or other building opening. Specifications for the proposed blowers are included as Attachment C. The SSDS shop design drawing is included as Attachment D.

Republic HRC 750 blower is rated to operate at an air flow up to 365 cubic feet per minute (CFM) and a maximum pressure of 64-inches of water column (in-WC). During the recent inspection, Blower # 2 was operating at 48 in-WC and historic reporting indicates maximum air flow up to 300 CFM. As depicted in the blower performance curve below, the HRC 750 blower will create 300 CFM at 50 in-WC. As such, the replacement blowers can create the same vacuum and the maximum air flow of the current 10 HP blowers reportedly produced in historic reports.

Republic HRC 750 Performance Curve



Post Corrective-Measures Testing

Following the replacement of the blowers, a complete round of testing will be conducted. The testing will include collection of sub-slab vacuum readings from the SVES monitoring points and

collection of system operational data, including vacuum/ pressure, air flow, temperature, PID readings. System data will be collected in accordance with the Site Management Plan.

SCHEDULE

The proposed corrective measure will be implemented within approximately 1-2 weeks of receipt of the replacement blower skirts, which are estimated to take approximately 6-8 weeks to ship. Once this CMWP scope is fully implemented, the work performed and results from testing will be included in an updated Periodic Review Report for the 2025 reporting period.

CERTIFICATION

I, Daniel Bellucci, P.E., certify that I am currently a NYS registered professional engineer and that this Corrective Measures Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Professional Engineer: Daniel Bellucci, P.E.

New York License Number: 099470

Engineering Firm: Bellucci Engineering, PLLC

Date: October 30, 2025



Warning: It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

Attachments

Attachment A: Photographic Log of Existing SSDS Blowers

Attachment B: Mitigation System Installation Records

Attachment C: Republic HRC 750 Blower Specifications & Fan Curves

Attachment D: SSDS Shop Design Drawing & Representative Photo of System Layout

Attachment A

Photographic Log of Existing SSDS Blowers

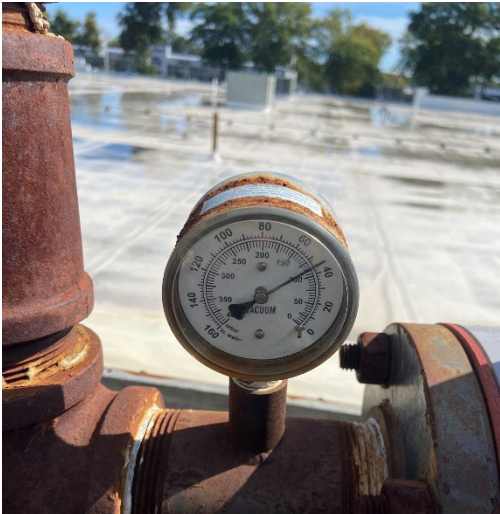
Appendix A – Photographic Log
 33 Route 304, Nanuet, Rockland County, NY
 VCP Site # V-00520, Site # 344036



Blower #1 Overview (9.26.25)



Blower #1 specification placard (9.26.25)



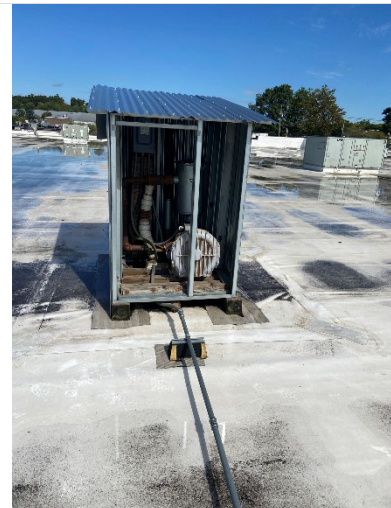
Blower #1 vacuum gauge (9.26.25)



Typical existing electric conduit across roof to blower



Blower #2 Overview (9.26.25)



Blower #2 Overview (9.26.25)

Appendix A – Photographic Log
33 Route 304, Nanuet, Rockland County, NY
VCP Site # V-00520, Site # 344036



Blower #2 specification placard (9.26.25)



Blower #2 enclosure interior (9.26.25)

Attachment B
Mitigation System Installation Records

Mitigation System Installation Record

☒ Structure was sampled previously

System Information

System ID: Site No:
Owner Name: Site Name:
System Address: Telephone:
City: Zip: Alt. Telephone:

Contractor Information

Installer Name: Company:
Telephone:

Building Conditions

Building Type:

Slab Integrity: ☐ Poor ☐ Average ☒ Good ☐ Excellent

Slab Penetrations: ☐ Sump ☐ Floor drain ☐ Perimeter drain ☐ Other

Describe:

Observed Water: ☒ Dry ☐ Damp ☐ Sump only ☐ Standing

Describe:

System Installation

Installation Type: Date Installed:

Slab Thickness (inches):

Subslab Material:

Subslab Moisture:

Number of Suction Points:

Number of Fans Installed:

☒ Fan #1 Operating

☐ Fan #2 Operating

☐ Fan #3 Operating

Fan Model No(s):

Fan Serial No(s):

Final U-Tube Levels:

Additional Mitigation Elements (check all that apply):

☐ Drainer ☐ Membrane ☐ Sealed cracks ☐ New floor ☐ Rain cap ☐ Other

Comments:

Communication Testing

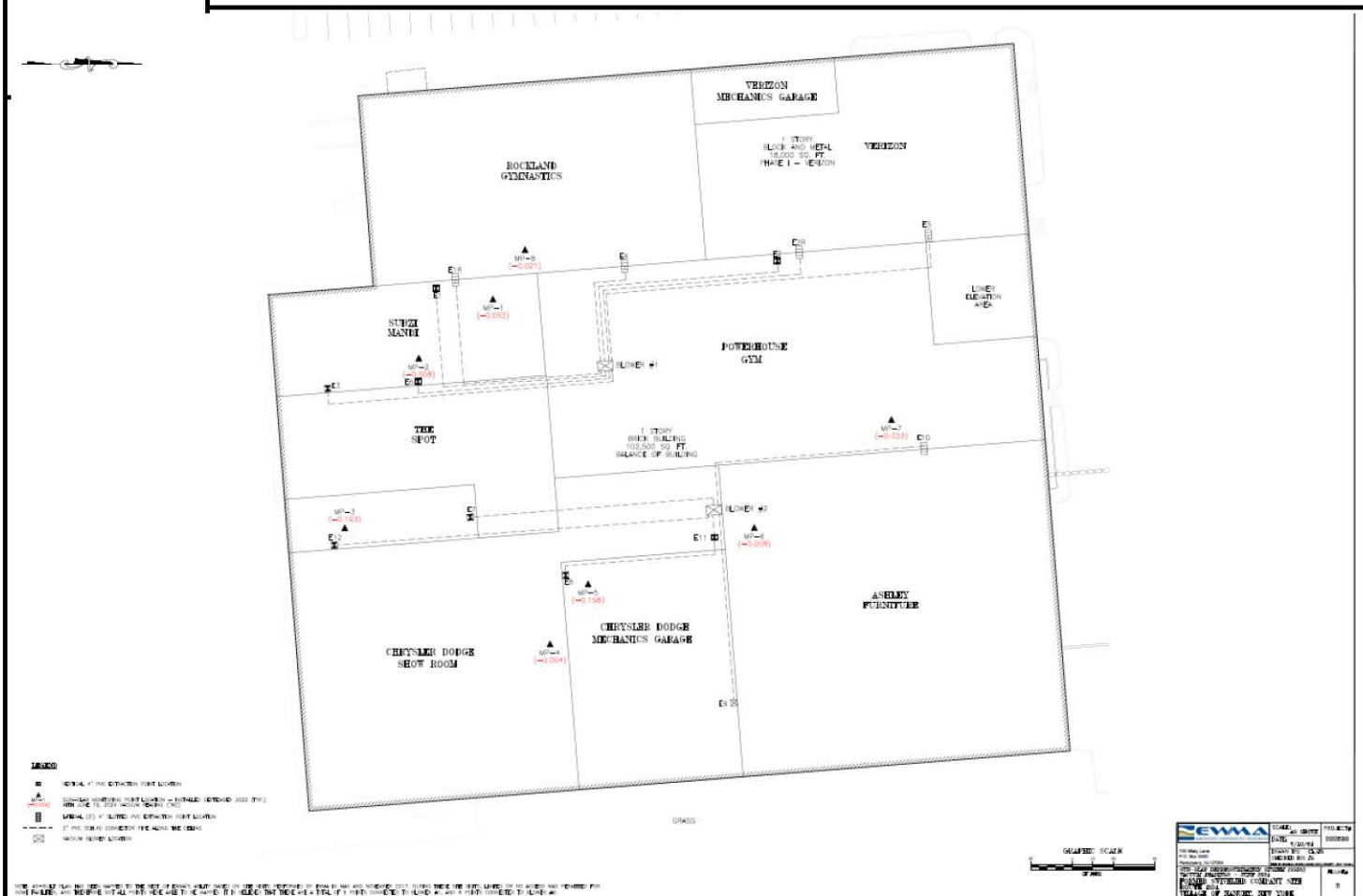
Test Method: Micromanometer

Meter Type/Manufacturer: Unknown- Conducted by Other

Location	Reading/Result	Dist. From Suction Point (ft)	Passed?
MP-1	-0.052	~20	☒
MP-2	-0.008	~10	☒
MP-3	-0.193	~8	☒
MP-4	-0.004	~35	☒
MP-5	-0.198	~10	☒

System Sketch

(indicate notable features, location of extraction points, and communication test holes)



Attachment C

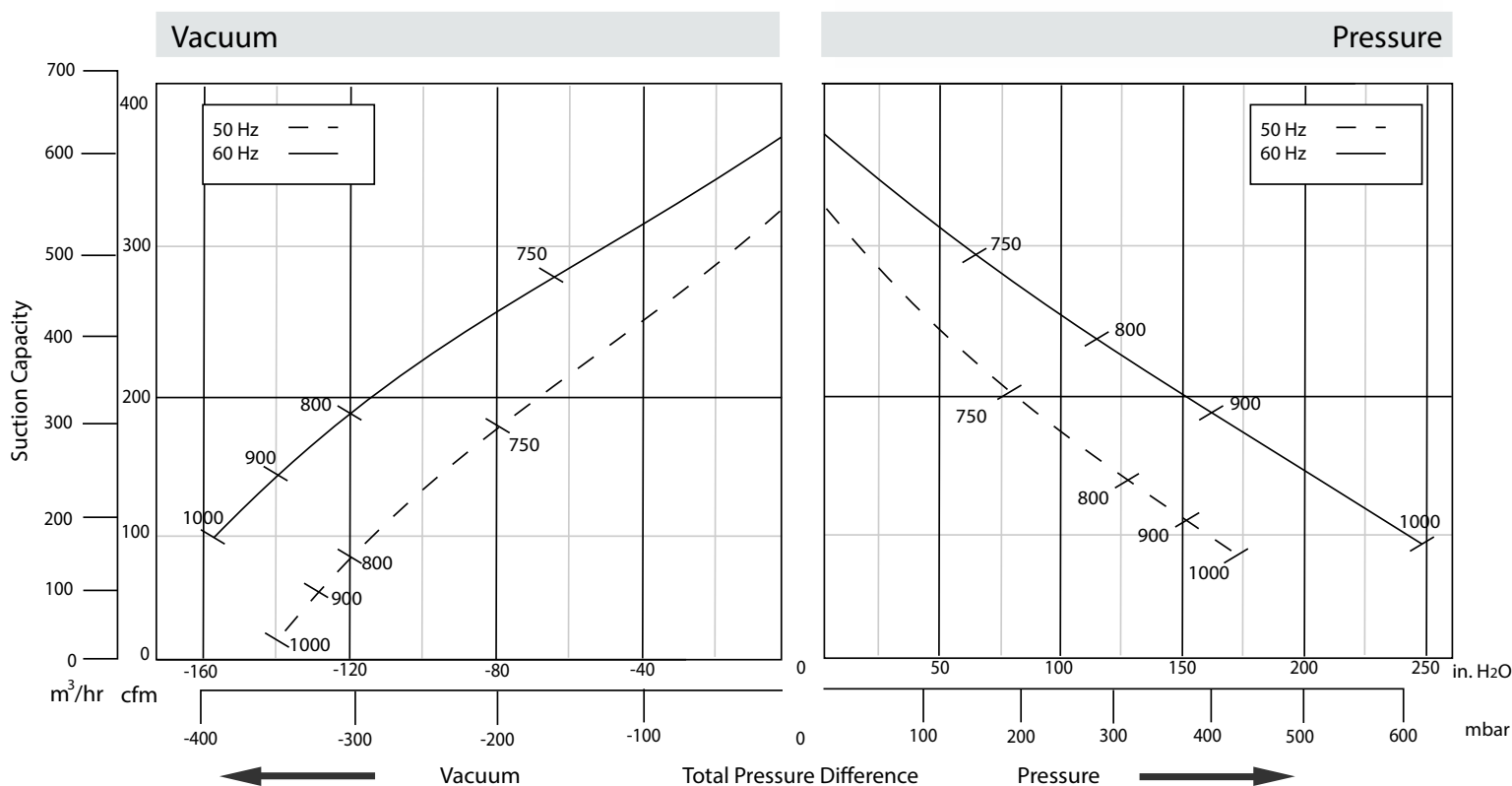
Republic HRC 750 Blower Specifications & Fan Curves

Republic offers a complete line of regenerative blowers for high vacuum or compressed air applications in both horizontal and vertical mounted positions. TEFC motors are rated for 50/60 Hz operation and are IE3, cUL, UL, and CE certified. The impeller is directly connected to the motor shaft, providing powerful air force without undue friction. The bearings are outside the compression chamber, ensuring maximum operational reliability under high differential pressure. Constructed in robust die-cast aluminum, this low-maintenance, oil-free design provides continuous, dependable service to our customers.

IE3
CC339B
CE
cUL **US**
E493872



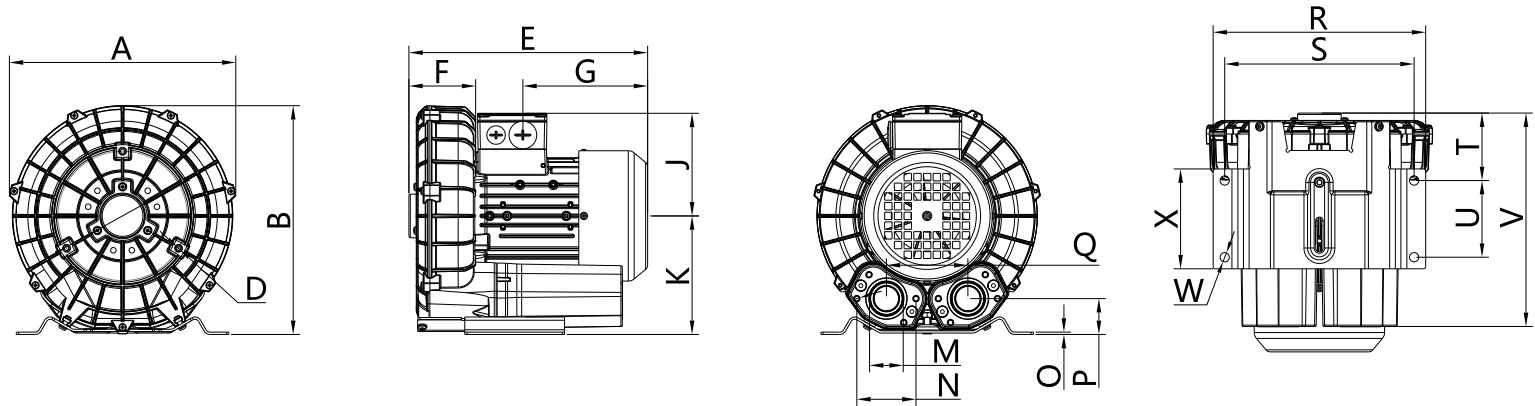
PERFORMANCE



Model	Phase	Frequency (Hz)	Air flow (CFM/m³/hr)	Rated Vacuum (in. H ₂ O/mbar)	Rated Pressure (in. H ₂ O/mbar)	Motor (HP/kW)	Voltage (V)	Current (A)	Sound Level (dB)	Weight (lb/kg)
HRC 750	3	50	312/530	80/200	80/200	5.8/4.3	190 △△/380 △	20.0 △△/9.5 △	70	112/51
		60	365/620	64/160	64/160	6.5/4.9	230 △△/460 △	19.0 △△/9.5 △	74	
HRC 800	3	50	312/530	120/300	128/320	7.4/5.5	190 △△/380 △	25.8 △△/12.9 △	70	137/62
		60	365/620	120/300	112/280	8.4/6.3	230 △△/460 △	25.8 △△/12.9 △	74	
HRC 900	3	50	312/530	129/320	153/380	10.1/7.5	190 △△/380 △	33.4 △△/16.7 △	70	143/65
		60	365/620	141/350	161/400	11.5/8.6	230 △△/460 △	30.0 △△/17.3 △	74	
HRC 1000	3	50	312/530	138/344	173/431	14.8/11.0	190 △△/380 △	48.5 △△/28.0 △	70	265/121
		60	365/620	158/394	248/618	16.9/12.6	230 △△/460 △	50.1 △△/29.0 △	74	

The performance curves are based on air at a temperature of 59 °F and an atmospheric pressure of 29.91 inch Hg with a tolerance of +/-10%. The total pressure differences are valid for inlet and ambient temperatures up to 77 °F. Suction capacity relates to inlet conditions. Pressure capacity relates to atmospheric conditions. For other conditions please contact Republic. Three phase motor tolerances are +/-10% for fixed voltage motors and +/-5% for voltage range motors. Single phase machines are designed with a +/-5% tolerance. The frequency tolerance is +/-2% maximum.

APPROXIMATE DIMENSIONS

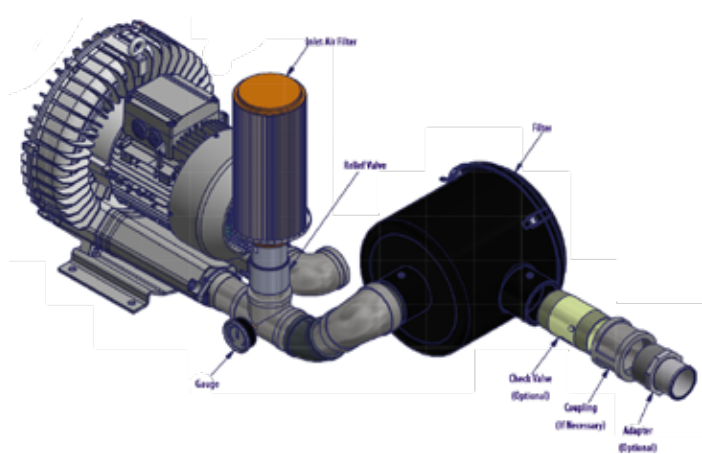


Model	Unit	A	B	D	E	F	G	J	K	M	N	O	P	Q	R	S	T	U	V	W
HRC 750	in	17.76	19.80	M10	17.76	5.87	11.42	5.83	9.41	2.50	3.70	0.24	2.52	8.54	15.51	14.02	4.92	6.69	12.52	0.59
	mm	451	503		451	149	290	148	239		94	6	64	217	394	356	125	170	318	15
HRC 800	in	17.76	19.80	M10	18.82	5.87	8.90	6.57	9.41	2.50	3.70	0.24	2.52	8.54	15.51	14.02	4.92	6.69	17.09	0.59
	mm	451	503		478	149	226	167	239		94	6	64	217	394	356	125	170	434	15
HRC 900	in	17.76	19.80	M10	18.82	5.87	8.90	7.76	9.41	2.50	3.70	0.24	2.52	8.54	15.51	14.02	4.92	6.69	17.09	0.59
	mm	451	503		478	149	226	197	239		94	6	64	217	394	356	125	170	434	15
HRC 1000	in	17.76	19.80	M10	18.82	5.87	8.90	7.76	9.41	2.50	3.70	0.24	2.52	8.54	15.51	14.02	4.92	6.69	17.09	0.59
	mm	451	503		478	149	226	197	239		94	6	64	217	394	356	125	170	434	15

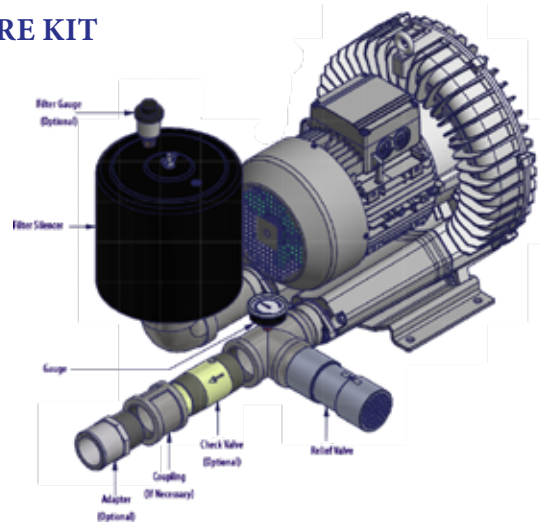
Available Options

All Republic Regenerative Blowers are available in pre-assembled kits for either pressure or vacuum applications. These kits include an inlet filter, gauge and relief valve, and are factory tested prior to shipment. Optional items for these kits include check valve, and tube adaptor; washdown motors, explosion proof motors, or other specialty motors; noise enclosures; and control panels such as VFD's, PLC's, or starter panels.

VACUUM KIT



PRESSURE KIT



DURA-BLOK™ Rooftop Supports



Our DURA-BLOK products gives you a versatile and long-term solution for all your roof top support needs. Designed with flexibility in mind, DURA-BLOK is ideal for roof top support applications such as pipe, HVAC, duct, conduit, cable tray, and roof walkways.

Manufactured to provide years of service in harsh, roof top environments, DURA-BLOK is made from 100% recycled rubber, require no supplemental rubber pads, and will not float or blow away. 1" (25.4) gaps between blocks allow water to flow freely around longer assemblies. For added strength, the DURA-BLOK support channel is through bolted on all sizes. For added visibility, a reflective strip is incorporated on both sides of each DURA-BLOK.

Beyond product durability, DURA-BLOK helps to dampen vibration, are not sharp or abrasive and require no roof penetration to maximize existing roof life - and roof structural and environmental integrity.

Recommended Torque (In channels)

Bolt Size	1/4"-20	5/16"-18	3/8"-16	1/2"-13
Foot/Lbs.	6	11	19	50
Nm	8	15	26	68

Bolt Size	M6x1	M8 x1.25	M10 x 1.5	M12x1.75
Nm	12	17	36	62
Foot/Lbs.	9	13	27	46

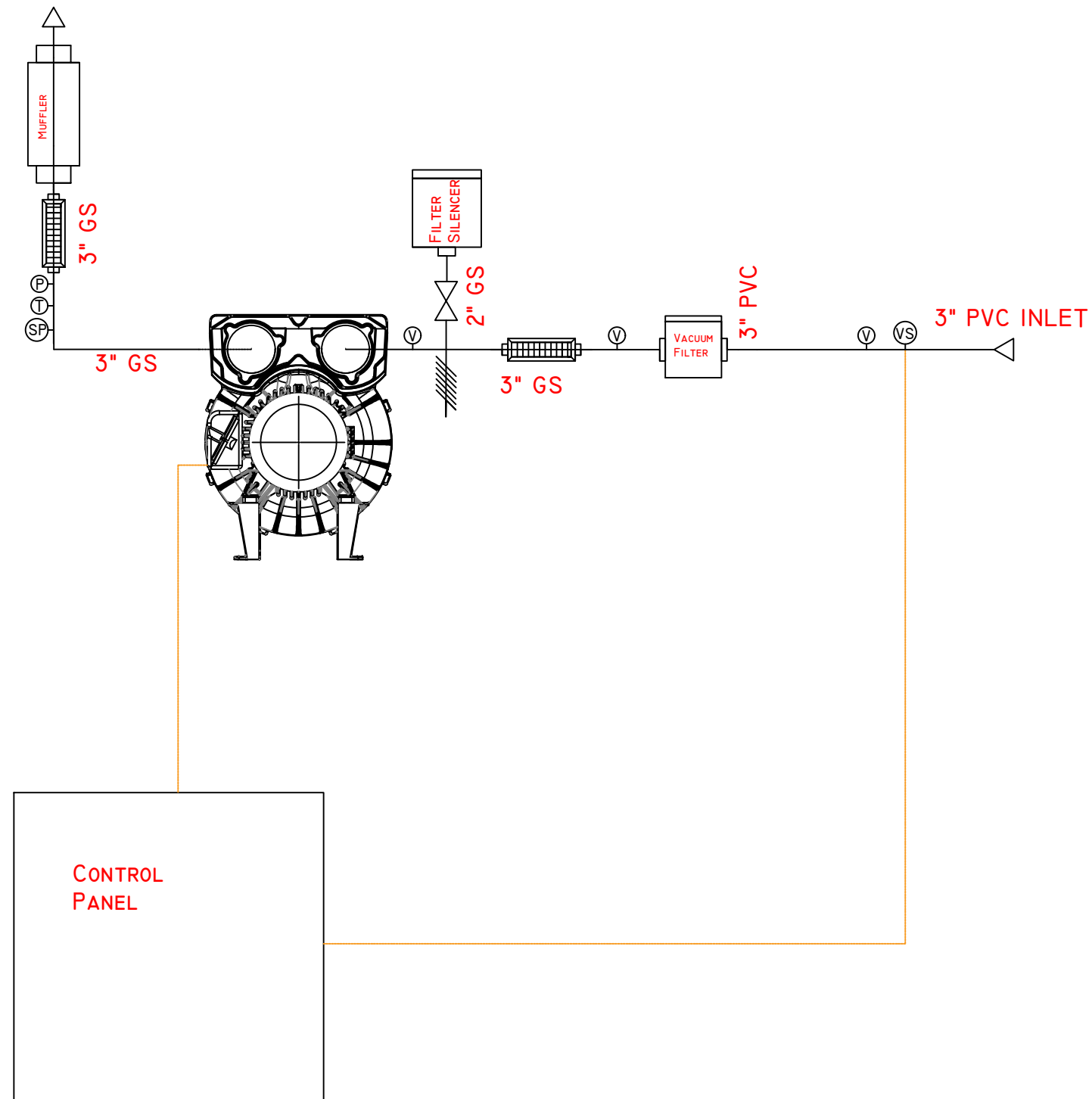
Materials & Finishes

See appropriate fitting pages.
Alternative finishes available upon request.

Metric

Metric dimensions are shown in parentheses.
Unless noted, all metric dimensions are in millimeters.

Attachment D
SSDS Shop Design Drawing
& Representative Photo of
System Layout

[illegible]

