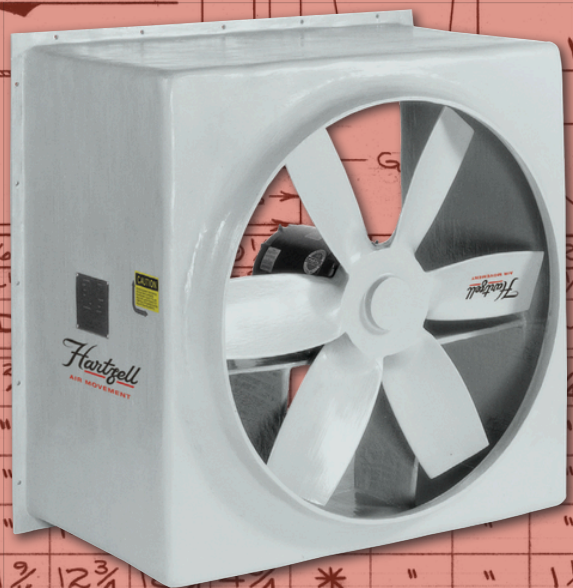
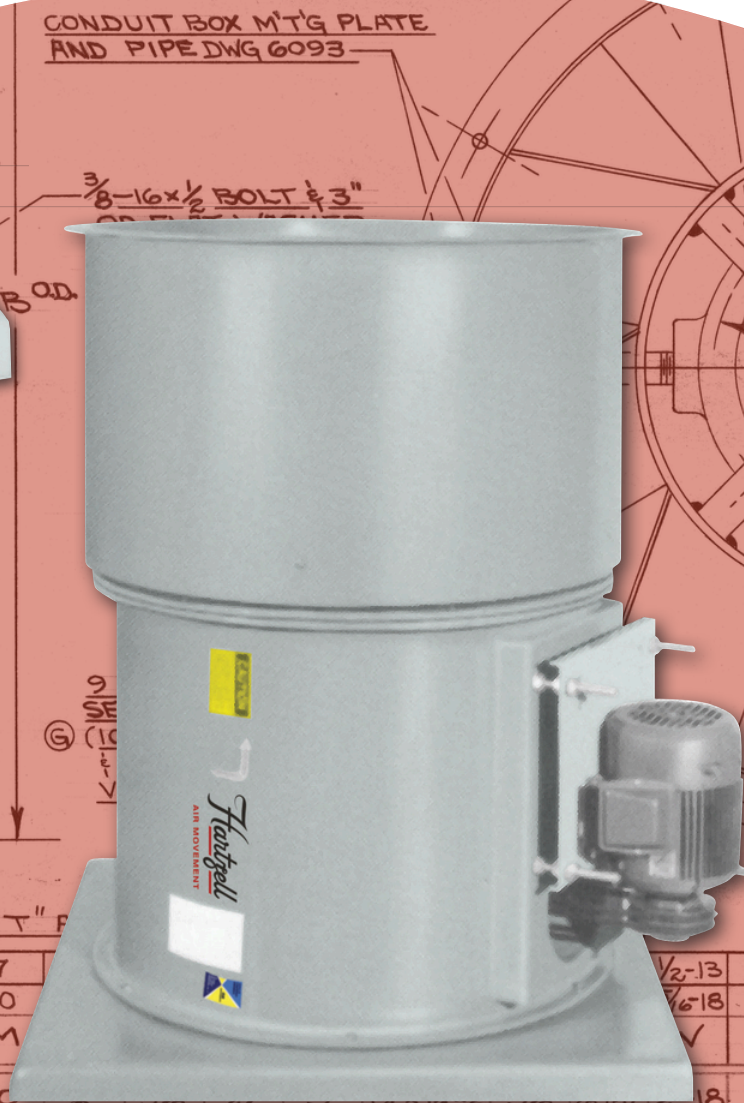




Fiberglass Roof & Wall Ventilators and Centrifugal Exhausters

SERIES 37, 57, 58, 59, 82, 83,
87, 88



Hartzell Air Movement

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Contact

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Website

www.hartzellairmovement.com

THE HARTZELL DIFFERENCE

Building the highest quality fans in America for generations



QUALITY AT EVERY TURN.

Hartzell Air Movement exceeds the standard in the air movement industry, committed to delivering top-quality, reliable products. And our relationship with our customers, and our knowledgeable, inventive, flexible and hardworking employees are the reasons we've continued and thrived, right here in the USA, for six generations.

Customers choose Hartzell for our:

- Durability and high performance
- Low cost of ownership
- Leadership in performance testing and certification
- Advanced engineering and manufacturing processes
- Innovative design and manufacturing
- Trusted brand name

Experienced Hartzell team to assist you from design to shipping

ISO9001:2015 Certification
AMCA Accredited Laboratory
Complete Fans and Blowers
Centrifugal Wheels
Airfoil Propellers

HARTZELL ADVANTAGES

A LIFETIME OF VALUE

- ☐ Industrial fans are field proven, 100% tested, with virtually no incident of return
- ☐ Energy efficient designs that provide a lower total cost of ownership

LEADERSHIP IN PERFORMANCE

- ☐ Products certified by AMCA that meet DOE recommended efficiencies
- ☐ Highly efficient industrial fan designs that are the quietest in the market
- ☐ Airfoil shape blades with industry leading measured efficiencies

ADVANCED ENGINEERING & MANUFACTURING

- ☐ Proven manufacturing techniques on state of the art equipment in ISO 9001:2015 registered facilities
- ☐ Engineering team utilizes the latest design tools in 3D CAD and other modeling software

CREATIVE DESIGN & MANUFACTURING TEAM

- ☐ Offering the greatest number of industrial fan design choices
- ☐ Building products to meet your rigorous application; no limiting catalog

TRUSTED BRAND NAME

- ☐ Extensive talent pool bringing over 145 years of knowledge and experience to you

5-YEAR WARRANTY

- ☐ The industry's first and only manufacturer that stands behind their products for a full 5-years



- ☒ Register your 5 year warranty
- ☒ Download your installation manual
- ☒ Order replacement parts

HARTZELL WARRANTY

LIMITED WARRANTIES, LIMITATION OF LIABILITY, AND LIMITATION OF LIABILITY FOR BREACH OF WARRANTY

NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS

Hartzell does not warrant that said goods are of merchantable quality or that they are fit for any particular purpose. There is no implied warranty of merchantability and there is no implied warranty of fitness.

The details of the Hartzell warranty can be found at <http://www.hartzellairmovement.com/warranty-service>

PERFORMANCE GUARANTEED

Your products are only as good as the components that go into them. We know you have high expectations, and so does Hartzell Air Movement. We know you expect the most reliable and durable industrial air movement products available, so we're holding ourselves to a higher standard. We're so sure that our products will out-perform industry standards, we're backing that promise with the industry's first – and only – five-year warranty.

At Hartzell, these are words we live by. They guide us every day. Good enough isn't how you design your products. It's not how we engineer, build and support our products — or provide ongoing service to our customers. When we looked at the industry standard two-year warranty, we knew we had to do better. And we did — by offering the Hartzell

FIVE-YEAR WARRANTY.

Register for your 5year warranty at <https://www.hartzellairmovement.com/warranty-and-parts/five-year-warranty>

Hartzell Air Movement proudly manufactures our fans right here in the USA!



Content

Options and Accessories	6
Upblast, Belt Drive Series 37	8
Upblast, Direct Drive Series 57	10
Belt Drive, Hooded Series 58E	11
Direct Drive Wall Ventilator Series 59	13
Exhausters Series 82, 83, 87, and 88	18
Corrosion Resistance Guide	21

ADVANTAGES OF FIBERGLASS CONSTRUCTIONFiberglass Roof Ventilators

A variety of corrosion problems plague the water and wastewater industry. Although fans and blowers made of coated steel or metals such as stainless, Hastelloy and monel can handle some of these challenges, Hartzell's fiberglass products unsurpassed resistance to a great majority of corrosive elements at a cost substantially below that of corrosion resistant metals.

ADVANTAGES

✓ FIBERGLASS OFFERS SUPERIOR CORROSION RESISTANT PROPERTIES

- ✓ Weighs 25% - 50% less than comparable equipment made of metal alloys
- ✓ Has an extremely high strength-to-weight ratio, stronger than steel on a per-pound basis
- ✓ Has excellent dimensional stability
- ✓ Will not become brittle at low temperatures and at -40°F laminated fiberglass will be stronger than at room temperature
- ✓ Offers a distinct price advantage over stainless and Monel (as much as 1/3 in original cost)
- ✓ Has a longer service life and requires less maintenance
- ✓ Offers weather-resistant characteristics – it will not tarnish and will never need painting
- ✓ Is extremely durable and highly resistant to impact

When optional surface veil, electrical grounding and dynamic balancing are applied, Hartzell Air Movement conforms to ASTM D4167-21 and ASTM E84-2008 Standard Specifications for Fiber-Reinforced Plastic (FRP) Fans and Blowers.

SUPERIOR CORROSION RESISTANCE

RESIN TRANSFER MOLDED



Hartzell offers the ONLY fiberglass wheels & propellers available in solid, one-piece design from the mold.

- ✓ Solid, one-piece design from an RTM mold – up to 60" dia.
- ✓ Consistent wheels and propellers with 98%+ exact wheels and propellers. Only variation is in the requested finishes.
- ✓ Repeatable Process
- ✓ Available in 12" - 60" diameters
- ✓ Much stronger wheels and propellers

Hartzell's fiberglass wheels and propellers are unique in the fan and blower industry.

They are manufactured as a single fiberglass piece using a multi-section RTM mold, ensuring that each wheel and prop is aerodynamically identical and provides reliable, repeatable performance without the variability of hand-made and taped components.

The superior design is a result of a substantial investment in research, development, tooling, and manufacturing methods by Hartzell Air Movement.

Hartzell Fiberglass Roof Ventilators are a practical choice for industrial applications where corrosive elements exist in fume and vapor form. They are designed and engineered to provide positive and accurate ventilation, regardless of internal plant and weather conditions.

The design utilizes a highly efficient fiberglass airfoil propeller in a heavy-duty, corrosion resistant fiberglass housing. The housing is

extremely durable and highly resistant to impact.

In addition, the units offer weather-resistant characteristics because of their fiberglass construction. They will not tarnish and will never need painting.

Standard Construction

- **Housings** – Constructed of a corrosion resistant vinylester resin with a Class I flame spread rate of 25 or less
 - **FRP Construction** – All structural parts in the airstream are fiberglass and resin. All taped joints inside the shell or body are three layers of two ounce material. After assembly, internal surfaces are coated with two coats of resin and external parts and surfaces are given one coat of resin.
 - **UV Inhibitor** – A UV inhibitor is added to the final coat of resin.
 - **Shafts & Hardware** – Airstream shafts, bolts, and screws are 304 SS. Monel shafting and hardware are available as an extra-cost option for applications such as hydrochloric, hydrofluoric, or sulfuric acids, which attack stainless. Where metal is subject to attack by the corrosive elements being handled, all metal parts can be resin-coated after assembly.
 - **Propellers** – are of one-piece construction, die formed of individual laminations of cloth mat plus woven roving.
- For Belt Drive Units:**
- **Bearing Covers** – Sealed with plastic foam tape and bolted to the bearing base.
 - **Shaft Seal** – A fiberglass and neoprene shaft seal is placed where the shaft leaves the bearing cover along with a neoprene shaft slinger on the fan shaft between the propeller and seal. The seal is not gas tight.

Installation Data

In the past, the majority of plant ventilation was accomplished by sidewall ventilation. However, this type of ventilation required extensive and expensive ductwork and proved to be inferior to roof ventilation.

Roof ventilators use little valuable internal space and offer the flexibility of rearranging production equipment without reconstructing ventilation systems and moving ductwork.

Hartzell offers three types of fiberglass roof ventilators, each designed with a particular type of installation in mind, to meet the majority of industrial corrosive applications.

Series 57: Fiberglass Upblast Roof Ventilator – Direct Drive
An efficient and economical choice for general ventilation or mildly corrosive atmospheres.

Series 37: Fiberglass Upblast Roof Ventilator – Belt Drive
A heavy-duty unit with the motor out of the airstream, best suited for application where severely corrosive elements exist or where the versatility of belt drive is required. Can be located at the end of ductwork.

Series 58: Fiberglass Hooded Roof Ventilator – Belt Drive
Provides complete protection from the elements for an exhaust operation.

Plant Layout

To design the plant ventilation layout, first determine the amount of CFM required:

1. Multiply the dimensions of the ventilated area to figure the cubic feet.
2. Take the cubic feet of the ventilated area and divide by the air exchange rate to figure the amount of CFM required.

EXAMPLE:

Ventilated Area: 120' x 50' x 20'

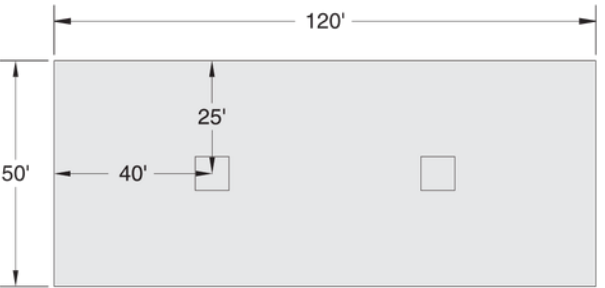
Air Exchange Rate: One change every 5 minutes

120' x 50' x 20' = 120,000 cu. ft.

120,000 cu. ft. ÷ 5 min. = 24,000 CFM

Second, determine the size and number of units needed to meet those requirements:

1. Divide the amount of CFM required by the number of units



desired (in this case, 2) to figure the capacity requirement for each ventilator.

24,000 CFM ÷ 2 units = 12,000 CFM

Note: Symmetrical spacing should be used whenever possible; however, care must be taken to adequately ventilate particularly troublesome areas.

Options and Accessories | Series 37, 57 and 58E

Abrasive/Erosive Resistant Coating

HartKoate is an abrasive/erosive resistant coating developed by Hartzell Air Movement for application in environments where abrasive/erosive conditions may exist. HartKoate helps prevent premature deterioration of equipment in environments where uncoated fans may fail.

HartKoate is applied to a 50-60 mil thickness suitable for temperatures to 200°F.

HartKoate is particularly appropriate for use when water mist and/or abrasive particles exist in the airstream.

Contact your Hartzell representative for further details concerning the application of HartKoate coating to fiberglass fans in corrosive atmospheres.

Hi-Cor Construction

All airstream surfaces exposed to the corrosive environment will be protected with a layer of Synthetic (Nexus) surfacing veil. An additional final coat of resin will be applied for extra corrosion resistance.

When Hi-Cor construction is required, the factory should be consulted concerning the corrosive environment involved.

Electrostatically Grounded

For applications in which fiberglass products are handling gas fumes that are not only corrosive but also potentially explosive, the equipment should be specially constructed to control and remove static electricity. Interior airstream surfaces can be coated with a “carbon rich” resin coat.

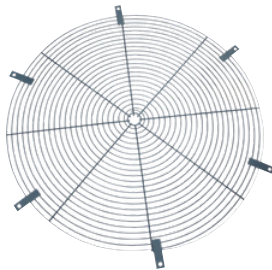
Grounding straps are secured from the side of the housing to the fan’s steel base. All that remains to effectively ground the airstream is to ground the fan base at the time of installation.

ASTM D4167-21 Construction

(ASTM D4167-21, Standard Specification for Fiber-Reinforced Plastic Fans and Blowers.) For corrosive systems where ASTM construction is specified this construction option adds: synthetic veil and electrostatically conductive surface coating applied to airstream housing and impeller surfaces, special nameplates, and special final dynamic balancing to fan.

Bird Screen

An epoxy coated steel spiral guard, located on top of ventilator discharge, to keep birds and other large debris from falling into the roof ventilator.



Safety Guard

Constructed of sixteen gauge, galvanized, epoxy coated, half inch wire mesh, the safety guard protects the floor area from falling debris and the ventilator from vandalism.

Prefabricated Curbs

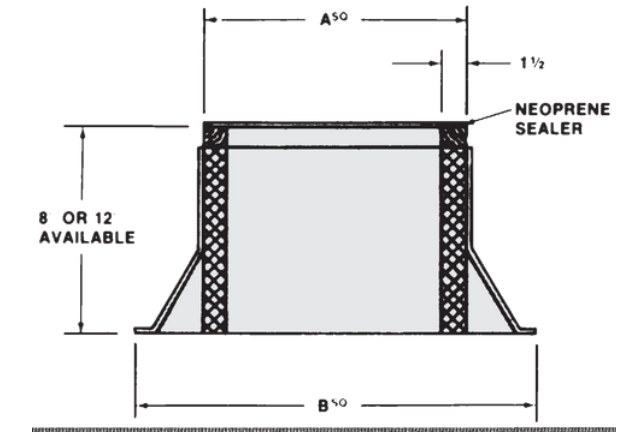
The CT-1 fiberglass prefabricated curb shown is for flat roof installation of Hartzell roof ventilators. The curb is designed for metal, concrete or wood roof decks that are not surface insulated. The curb is available either 8" or 12" high.

A Model IRC-1 prefabricated curb constructed of galvanized steel is also available with identical features as Model CT-1. Galvanized models can be furnished with epoxy coating. Aluminum construction also available.

All prefabricated curbs can be furnished for slope or peak bases. Prefabricated curbs are designed to support the weight of the fans cataloged herein, and attachments not exceeding over 100 additional pounds in a 40 mph wind. Nonstandard curb construction is available.

Features:

- Nailor Strip – strip facilitates fastening the ventilator to the curb.
- Glass Fiber Insulation - a rigid 1 1/2" thick 3 lbs. density liner eliminates condensation problems.
- Neoprene Sealer – 1/4" strip.
- Construction: CT-1 - Isophthalic resin, no pigmentation
IRC-1 - Galvanized steel (18 ga.)
IRC-1 - Aluminum (.063 ga.)



Options and Accessories continued

Combination Motor Cover & Belt Guard

Constructed of epoxy coated, hotrolled steel. Provides weather protection and guards the drive sheaves and belts. The covers are vented. **Series 37 and 58E only.**

Fiberglass Motor Cover

Designed to fit fiberglass roof ventilators. The cover is solid fiberglass and die-formed with injection molded louvers.

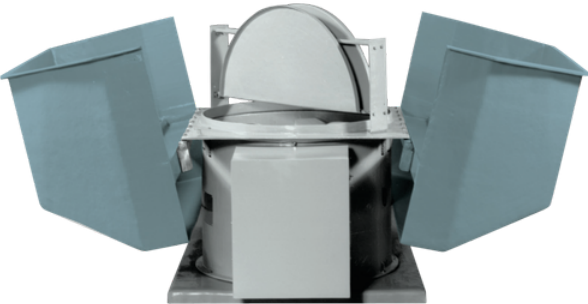


Disconnect Switch

Mounted and wired, provides safety during maintenance.

Hinged Hood

A stationary, removable, fiberglass hood is standard. Hinged construction is available for access to the fan without removing the hood. Stationary and hinged hoods are one-piece construction up to size 32" and two-piece construction from sizes 36" to 60". **Series 58E only.**



Backdraft Dampers

Backdraft dampers are available on hooded ventilators for exhaust operation only. The dampers are mounted in the hood. Two semi-circular lids open when the unit is on and close when the unit is off. When backdraft dampers are required, a hinged hood must also be used. See CFM Limitations for Damper Lid Operation chart for damper lid limits. **Series 58E only.**

CFM Limitations for Damper Lid Operation

CFM	Fan Size												
	12	16	18	20	24	28	32	36	40	44	48	54	60
Minimum*	1195	2080	2615	3210	4586	6200	8065	10175	12525	15120	17960	22890	28180
Maximum**	2726	4750	6976	7335	10475	14175	18435	23250	28630	34560	41055	52315	64410

*Minimum CFM to open lids **Maximum CFM to prevent lid damage



The “Hartzell Experience” product trailer travels all over the U.S. and Canada exhibiting quality air moving products. Call your local sales representative to schedule a visit in your area today!

Series 37

Upblast,BeltDrive Roof Ventilator

Series 37 Fiberglass, UpblastRoof Ventilators are heavy-duty units with the motor out of the airstream. They are best suited for applications where severe corrosive elements exist or where the versatility of belt drive is required. The unit’s fiberglass duct fan and exterior-mounted motor makes it well-suited for fume exhaust.

Features:

- **Sizes** – 12" to 60"
- **Performance** – 1,195 to 64,410 CFM at free air
- **Temperature** – Suitable for temperatures up to 200°F
- **Corrosion-Duty Construction** – The sturdy, three piece unit (windband, duct fan and panel) is constructed of fiberglass. All airstream hardware is stainless steel. Belts, bearings, sheaves and shaft are enclosed and protected from the airstream. The drive compartment is located on the negative pressure (suction) side of the propeller, drawing in ambient air from outside the fan and over the belts and bearings; this ensures a contaminant-free compartment.
- **Motor** – The motor is exterior mounted out of the airstream. The propeller shaft rotates in two heavy-duty bearings mounted on fiberglass supports taped to the inner shell with “T” reinforcements. Totally enclosed, fan cooled motors are standard. Special motors are available upon request.
- **Propellers** – Single piece, solid fiberglass construction
 - Sizes 12" to 48" – 6-blade, Type-FW
 - Sizes 54" and 60" – 4 and 6 blade adjustable, Type AF
- **V-Belt Drives** – Oversized for long life and continuous duty. Variable pitch through 48" fan size. Oil, heat and static resistant type.
- **Bearings** – Bearings are deep-row radial ball or roller type, self-aligning, shielded and mechanically sealed in cast iron or malleable housings. Long inner race insures even load distribution, providing a high radial and thrust load capacity. Bearings are relubricable. Minimum 50,000 hours L-10 bearing life.
- **Lubrication Tubes** – Extend from the bearings through the belt tube to the exterior of the fan housing. Allows for ease of maintenance.
- **Stack Cap** – Butterfly dampers open when the unit is on and close weathertight when unit is off. The discharge airstream prevents entry of rain or snow during operation. Fiberglass dampers are mounted on corrosive-resistant rods which turn in long-life synthetic bearings. The stack cap is designed with enough height to effectively prevent wind resistance against the operation of the ventilator.
- **Curb Panel** – Constructed of heavy-duty fiberglass, it provides a convenient method of curb mounting a roof ventilator.
- **Lifting Lugs** – Lifting lugs come standard to facilitate installation.



For performance data, please visit www.hartzellflow.com or contact your local sales representative.

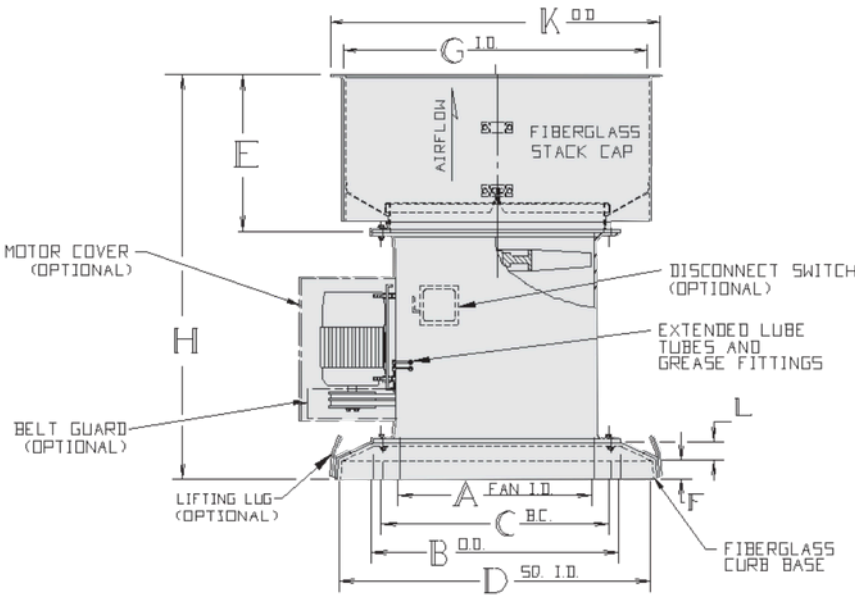


Hartzell Air Movement certifies that the Series 37, Fiberglass Upblast Roof Ventilator, shown herein is licensed to bear the AMCA seal for sound and air performance. Ratings are based on tests and procedures performed in accordance with AMCA Publication 211 and Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. For performance and sound data, please visit www.hartzellflow.com or contact your local sales representative.



Series 37 Fiberglass Upblast Roof Ventilator

Dimensions



Principal Dimensions (inches) – Series 37

Fan Size	A	B	C	D	E	F	G	H	K	L
12	1 2 7/8	1 6 1/4	14 1/2	22	16 3/4	2	16 7/8	40 1/2	19 3/8	1 1/2
16	16 7/8	20	18 1/2	26	18 1/4	2	20 7/8	42 1/16	23 3/8	1 7/16
18	18 7/8	2 2 1/8	20 1/2	28	20 3/4	2	24 7/8	46 1/2	27 7/8	1 3/8
20	20 7/8	24 1/8	22 1/2	30	20 3/4	2	24 7/8	49 1/2	27 7/8	1 3/8
24	24 7/8	28 1/2	26 5/8	36	18 1/4	2 3/16	28 7/8	47 1/2	31 7/8	1 5/16
28	28 7/8	32 3/8	30 5/8	42	20 3/4	2 3/16	33	50 1/2	36 1/8	2 3/16
32	33	36 1/2	34 7/8	42	24 1/4	2 1/8	37	55 1/16	40 1/8	1 7/16
36	37	40 5/8	38 7/8	48	26 1/2	2 1/8	45	58 1/16	48 1/8	1 13/16
40	41	44 1/8	43 1/8	50	30 1/4	2 1/16	49 1/8	69 1/2	53 3/8	1 9/16
44	45	48 1/8	47 1/8	54	31 3/4	2 1/16	49 1/8	71 1/2	53 3/8	1 9/16
48	49 1/8	53 3/8	51 5/8	60	33 3/4	2 9/16	55 3/8	73 1/16	59 5/8	1 5/8
54	55 3/8	5 9 5/8	57 5/8	64 1/4	37 1/4	2 9/16	61 3/4	81 1/2	6 5 5/8	1 5/8
60	61 3/8	6 5 5/8	63 5/8	70 1/4	42 3/4	2 9/16	68	86 1/2	72	1 5/8

Note: Specifications are subject to change. Certified prints are available.

Series 57

Upblast,Direct Drive, Roof Ventilator

Series 57 Upblast Roof Ventilators are an efficient, economical choice for general ventilation or mildly corrosive atmospheres. They should not be used in atmospheres where the corrosive concentration is enough to damage the motor. The design incorporates the Hartzell panel fan concept with a wind-band and butterfly dampers. The dampers open automatically when the fan goes on and close weathertight when the fan is shut down. During operation, the force of the discharge air effectively prevents entry of rain or snow.

Features:

- **Sizes** – 28" to 60"
- **Performance** – 7,300 CFM to 51,000 CFM at free air
- **Temperature** – Suitable for temperatures up to 180°F
(Specially insulated motors are required for temperatures above 104°F.)
- **Motor Mount** – The mount is an epoxy coated, welded, steel rod assembly. Stainless steel is available as an option. Airstream hardware is stainless steel, coated with resin after assembly. The mount supports the motor below ventilator and offers minimum resistance to the airflow. The assembly bolts to the orifice panel.
- **Propellers** – Propellers are one-piece fiberglass construction and electronically balanced on unit at operating speed to ensure vibration-free operation.
 - Sizes 28" to 48" –6-blade, Type-FW
 - Sizes 28" and 44" – Also available as 6-blade, Type-M
 - Sizes 54" and 60" – 2-blade, Type-M
- **Motors** – Motors are totally enclosed. Mill and chem are standard. Other motors are available upon request.
- **Orifice Panel** – Inlet orifice increases efficiency by minimizing air friction.
- **Windband** – Designed with the necessary height to effectively prevent wind resistance against the operation of the ventilator.
- **Dampers** – Two fiberglass semi-circular lids at the base of the windband are mounted on stainless steel rods which turn in synthetic bearings. Fiberglass lids are very durable and have a longer lid life than steel. Fiberglass also has insulation qualities, which results in less heat loss when the unit is idle during winter months. See CFM Limitations for Damper Lid Operation chart for damper lid limits.
- **Lifting Lugs** – Lifting lugs come standard to facilitate installation.



For performance data, please visit www.hartzellflow.com or contact your local sales representative.

Series 58E

Belt Drive,Hooded Roof Ventilator

The Series 58E Fiberglass Hooded Roof Ventilator provides complete protection from the elements. The unit's belt drive configuration and exterior-mounted motor, makes it a logical choice for an exhaust application where corrosive elements exist and protection from the weather is essential.

Features:

- **Sizes** – 12" to 60"
- **Performance** – 1,260 to 63,470 CFM at free air
- **Temperature** – Suitable for temperatures up to 200°F
- **Hood** – Fiberglass construction. A stationary, removable hood is standard. Optional hinged construction is available for access to the fan without removing the hood. Stationary and hinged hoods are one-piece construction up to size 32" and two-piece construction from sizes 36" to 60".
- **Curb Panel** – Constructed of heavy-duty fiberglass, it provides a convenient method of curb mounting a roof ventilator.
- **Motor** – The motor is exterior mounted out of the airstream. The propeller shaft rotates in two heavy-duty bearings mounted on fiberglass supports taped to the inner shell with "T" reinforcements. Totally enclosed, fan cooled motors are standard. Special motors are available upon request.
- **Corrosion-Duty Construction** – Belts, bearings, sheaves and shaft are enclosed and protected from the airstream. The drive compartment is located on the negative pressure (suction) side of the propeller drawing in ambient air from outside the fan and over the belts and bearings; this ensures a contaminant-free compartment.
- **Propellers** – Single piece, solid fiberglass construction.
 - Sizes 12" to 48" – 6-blade, Type FW
 - Sizes 54" and 60" – 6-blade adjustable, Type AF
- **V-Belt Drives** – Oversized for long life and continuous duty. Variable pitch through 48" fan size. Oil, heat and static resistant type.
- **Bearings** – Bearings are deep-row radial ball or roller type, self-aligning, shielded and mechanically sealed in cast iron or malleable housings. Long inner race insures even load distribution, providing a high radial and thrust load capacity. Bearings are relubricable. Minimum 50,000 hours L-10 bearing life.
- **Lubrication Tubes** – Extend from the bearings through the belt tube to the exterior of the fan housing. Allows for ease of maintenance.
- **Construction Options** – The Series 58E (Exhauster) can be supplied in Series 58I (Intake) configuration. Contact factory for additional information.
- **Lifting Lugs** – Lifting lugs come standard to facilitate installation.

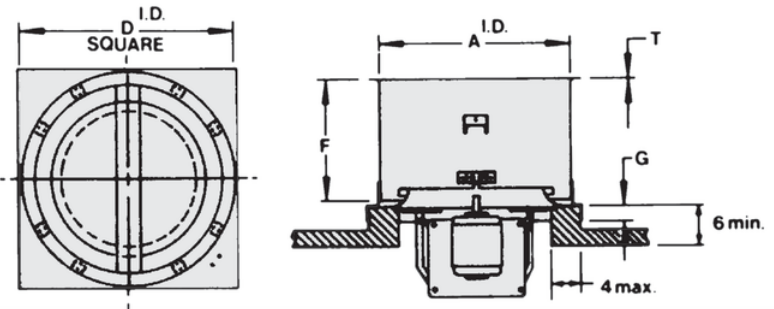


For performance data, please visit www.hartzellflow.com or contact your local sales representative.



Series 58E Fiberglass Hooded Roof Ventilator

Dimensions

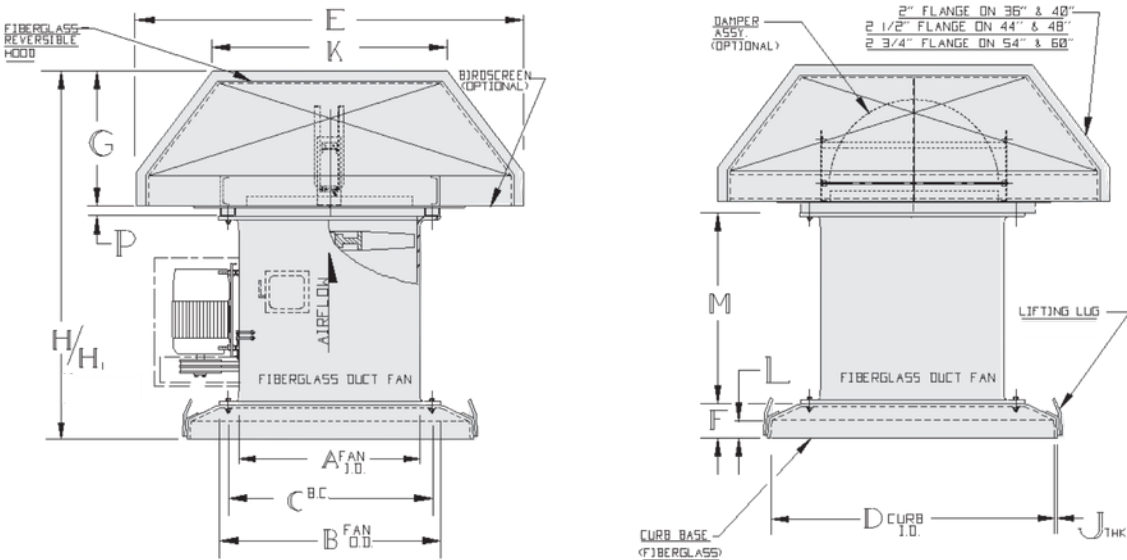


Principal Dimensions (in.) – Series 57

Size	28	32	36	40	44	48	54	60
A	33	37	45	49 ¹ / ₈	49 ¹ / ₈	55 ³ / ₈	61 ³ / ₄	68
D	42	42	48	50	54	60	64 ¹ / ₄	70 ¹ / ₄
F	19 ¹ / ₂	23	25 ¹ / ₄	29	30 ¹ / ₂	32 ¹ / ₂	36	41 ¹ / ₂
G	23 ¹ / ₄	23 ¹ / ₄	23 ¹ / ₄	23 ¹ / ₄	23 ¹ / ₄	33 ¹ / ₄	33 ¹ / ₄	33 ¹ / ₄
T	1 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₄	5 ¹ / ₁₆	5 ¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₂

Note: Specifications are subject to change. Certified prints are available.

Dimensions



Principal Dimensions (inches) – Series 58

Fan Size	A	B	C	D	E	F	G	H	H _i	J	K	L	M	P
1	12 ⁷ / ₈	16 ¹ / ₄	14 ¹ / ₂	22	36 ³ / ₈	3 ³ / ₈	14 ¹⁵ / ₁₆	38 ⁹ / ₁₆	39 ⁷ / ₁₆	5 ⁵ / ₁₆	2	2	20	1 ¹ / ₂
2	18 ⁷ / ₈	22 ¹ / ₈	20 ¹ / ₂	28	36 ³ / ₈	33 ³ / ₈	14 ¹⁵ / ₁₆	40 ¹ / ₁₆	41 ⁷ / ₁₆	5 ⁵ / ₁₆	2	2	22	11 ¹ / ₂
1	24 ⁷ / ₈	28 ¹ / ₂	26 ⁵ / ₈	36	58 ¹ / ₂	4	24	53	55	7 ¹ / ₁₆	34 ¹ / ₂	2 ⁵ / ₁₆	25	2
8	28 ⁷ / ₈	32 ³ / ₈	30 ⁵ / ₈	42	58 ¹ / ₂	4 ³ / ₈	24	53 ³ / ₈	55 ⁵ / ₈	7 ¹ / ₁₆	34 ¹ / ₂	2 ⁵ / ₁₆	25	2
2	33	36 ¹ / ₂	34 ⁷ / ₈	42	58 ¹ / ₂	3 ⁷ / ₁₆	24	55 ⁵ / ₁₆	57 ¹ / ₁₆	7 ¹ / ₁₆	34 ¹ / ₂	2 ⁵ / ₁₆	28	2
4	37	40 ⁵ / ₈	38 ⁷ / ₈	48	76 ¹ / ₂	3 ⁵ / ₁₆	29 ³ / ₄	61 ¹ / ₁₆	63 ¹ / ₁₆	7 ¹ / ₁₆	53 ¹ / ₁₆	2 ⁵ / ₁₆	28	2
2	41	44 ¹ / ₈	43 ¹ / ₈	50	76 ¹ / ₂	3 ⁷ / ₁₆	29 ³ / ₄	69 ³ / ₈	71 ³ / ₈	7 ¹ / ₁₆	53 ¹ / ₁₆	2 ⁵ / ₁₆	36	2
8	45	48 ¹ / ₈	47 ¹ / ₈	54	91 ¹ / ₂	3 ⁷ / ₁₆	33 ³ / ₄	73 ³ / ₈	75 ³ / ₈	7 ¹ / ₁₆	62 ¹ / ₁₆	2 ⁵ / ₁₆	36	2
3	49 ¹ / ₈	53 ³ / ₈	51 ⁵ / ₈	60	91 ¹ / ₂	3 ¹⁵ / ₁₆	33 ³ / ₄	73 ³ / ₁₆	76 ⁵ / ₁₆	7 ¹ / ₁₆	62 ¹ / ₁₆	2 ⁵ / ₁₆	36	21 ¹ / ₂
2	55 ⁵ / ₈	59 ⁵ / ₈	57 ⁵ / ₈	64 ¹ / ₄	113	3 ⁷ / ₁₆	39 ³ / ₄	83 ³ / ₈	86 ³ / ₈	7 ¹ / ₁₆	7	2 ⁵ / ₁₆	40	21 ¹ / ₂
3	61 ³ / ₈	65 ⁵ / ₈	63 ⁵ / ₈	70 ¹ / ₄	113	3 ⁷ / ₁₆	39 ³ / ₄	83 ³ / ₈	86 ³ / ₈	7 ¹ / ₁₆	7	2 ⁵ / ₁₆	40	21 ¹ / ₂
6														

Note: Specifications are subject to change. Certified prints are available.

Call and speak to your local Hartzell Air Movement sales representative about a fiberglass roof ventilator, wall ventilator or centrifugal exhauster today!

Series 59
FiberglassDirect Drive
Wall Ventilator

Hartzell Fiberglass Direct Drive Wall Ventilators are designed for general ventilation where corrosive elements exist in fume or vapor form. The units are manufactured out of solid fiberglass and designed to pass through a framed up wall opening as a complete assembly, either by itself, or with accessories.

Hartzell wall ventilators utilize a highly efficient, one-piece, solid fiberglass airfoil type propeller from an RTM mold. The fan housing incorporates the Hartzell Air Seal, which allows the orifice ring to overlap the propeller tips. This practically eliminates back flow of air and increases efficiency by 10% or more by minimizing air friction through the fan.

Features:

- **Sizes**–12"to 60"
- **Performance** – 1,315 to 55,500 CFM at free air
- **Temperature** – Suitable for temperatures up to 180°F (Specially insulated motors are required for temperatures above 104°F.)
- **Unit Construction** –
 - Fan housing** – One piece molded fiberglass fan housing with solid fiberglass motor support base. Fan housing includes venturi orifice to increase efficiency and seal propeller tips.
 - Motor mounting base** – Fabricated of solid fiberglass, designed to maximize strength and minimize restrictions to air flow.
 - Propellers** – One piece fiberglass airfoil construction, electronically balanced on unit at operating speed.
- **Motors** – Totally enclosed mill and chem motors are standard. Other motors are available upon request.
- **Hardware** – Stainless Steel motor mounting hardware is standard. Monel hardware is available at an extra cost. Fiberglass accessory mounting hardware is standard stainless steel.



For performance data, please visit www.hartzellflow.com or contact your local sales representative.

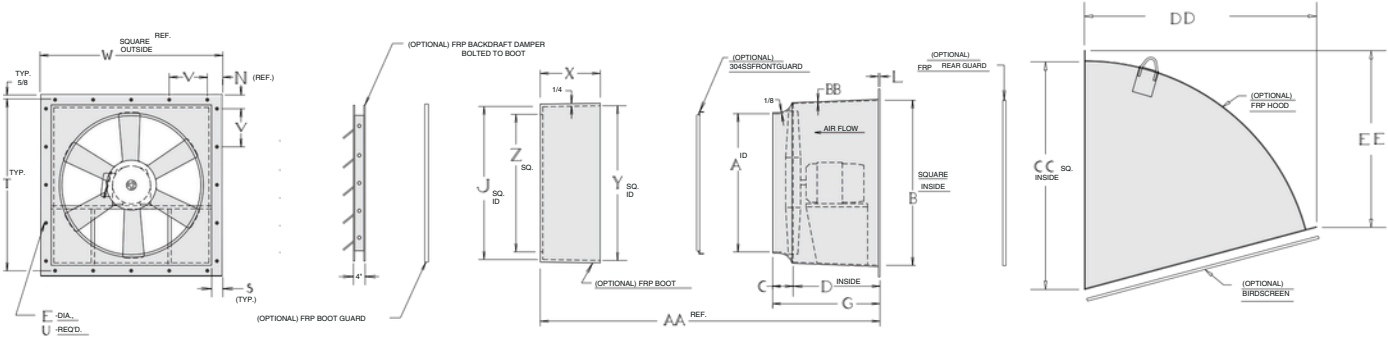


Hartzell Air Movement certifies that the Series 59, Fiberglass Panel Fan, Direct Drive, shown herein is licensed to bear the AMCA seal for sound and air performance. Ratings are based on tests and procedures performed in accordance with AMCA Publication 211 and Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. For performance and sound data, please visit www.hartzellflow.com or contact your local sales representative.



Series 59 Fiberglass Wall Ventilator with a Series FEP Fiberglass End Pivoted Automatic Shutter used for building exhaust.

Dimensions



Principal Dimensions (inches) – Series 59

Fan Size	A	B	C	D	E	G	J	L	N	R	S	T	U
1	12¼	16½	15⅛	13⅜	516	15	16¼16	¼4	4	17¼4	11½2	18¼4	12
2	16516	20½2	21⅛8	137⅛8	516	16	20⅞16	¼4	4	21¼4	11½2	22¼4	12
1	18¼4	22½2	21¼4	15¾4	516	18	22⅞16	¼4	4	23¼4	11½2	24¼4	12
6	20516	25½2	21½2	15½2	516	18	25⅞16	¼4	41½2	26¼4	11½2	27¼4	12
1	24516	28¾4	31¼4	15¾4	516	19	28⅞16	⅜8	43¼4	29¾4	11½2	31¼4	20
8	28516	33¾4	31¼4	16¼4	516	19½2	33⅞16	⅜8	43¼4	34¾4	11½2	36¼4	20
2	30516	35¾4	31½2	17¼4	716	20¾4	35⅞16	⅜8	51¼4	36¾4	2	39¼4	20
0	32516	36¾4	33⅞8	18⅜8	716	21½2	36⅞16	⅜8	51¼4	37¾4	2	40¼4	20
2	36516	42¾4	33⅞8	19⅜8	716	22¾4	42⅞16	⅜8	51¼4	43¾4	2	46¼4	20
4	40516	47	35⅞8	23⅜8	716	27	46⅞16	½2	51½2	48¼4	2	50¼4	20
2	42516	49	43¼4	22¼4	716	27	48⅞16	½2	55⅞8	50¼4	2	52¼4	20
8	44516	51	41½2	24½2	716	29	50⅞16	½2	51⅞16	56¼4	2	54¼4	20
3	48516	55	41¼4	24¾4	716	29	54⅞16	½2	51⅞16	62¼4	2	58¼4	28
0	54516	61	43⅞8	245⅞8	716	29	60⅞16	½2	51⅞16	68¼4	2	64¼4	28
3	60516	67	51½2	24½2	716	30	66⅞16	½2				70¼4	28
2					716								
3													
6													

Fan Size	V	W	X	Y	Z	AA	BB	CC	DD	EE	Max. Motor Frame	Approx. Wt. # Lbs. Motor & Options
12	6	20	13¾4	16⅜8	12½2	27¼4	¼4	21	22¼4	17¼16	48	30
16	8	24	14¼8	20⅜8	16½2	28⅞8	¼4	30	31¼16	23¾4	56	35
18	9	26	14½2	22⅜8	18½2	30⅜8	¼4	30	31¼16	23¾4	56	40
20	10	29	14½2	25⅜8	20½2	30⅞8	¼4	30	31¼16	23¾4	184T	45
24	53¼4	32½2	15½2	28⅜8	24½2	31⅜8	¼4	39	395⅞8	307¼16	184T	60
28	7	37½2	15½2	33⅜8	28½2	317⅞8	¼4	39	395⅞8	307¼16	184T	75
30	71½2	40½2	15½2	35⅜8	30½2	327⅞8	¼4	48	483⅜8	37¼16	215T	85
32	73¼4	41½2	15½2	36⅜8	32½2	34	¼4	48	483⅜8	37¼16	215T	110
36	91¼4	47½2	16½2	42⅜8	36½2	35½2	¼4	56	56	43	215T	125
40	10¼4	52	16⅜8	46⅜8	40½2	397⅞8	⅜8	69	685⅞8	525⅞8	254T	230
42	10⅞16	54	16¾4	48⅜8	42½2	39⅞8	⅜8	69	685⅞8	525⅞8	254T	240
44	11	56	16¾4	50⅜8	44½2	41⅜8	⅜8	69	685⅞8	525⅞8	254T	255
48	8516 9516	60	16¾4	54⅜8	48½2	415⅞8	⅜8	69	685⅞8	525⅞8	256T	290
54	10516	66	17	60⅜8	54½2	41¾4	⅜8	79	78¼4	60¼16	256T	305
60		72	17½2	66⅜8	60½2	42⅞8	⅜8	89	877⅞8	677¼16	256T	320

Options and Accessories | Series 59

Abrasive/Erosive Resistant Coating

HartKoate is an abrasive/erosive resistant coating developed by Hartzell Air Movement for application in environments where abrasive/erosive conditions may exist. HartKoate helps prevent premature deterioration of equipment in environments where uncoated fans may fail.

HartKoate is applied to a 50-60 mil thickness suitable for temperatures to 200°F.

HartKoate is particularly appropriate for use when water mist and/or abrasive particles exist in the airstream.

Contact your Hartzell representative for further details concerning the application of HartKoate coating to fiberglass fans in corrosive atmospheres.

Hi-CorConstruction

All airstream surfaces exposed to the corrosive environment will be protected with a layer of Synthetic (Nexus) surfacing veil. An additional final coat of resin will be applied for extra corrosion resistance.

When Hi-Cor construction is required, the factory should be consulted concerning the corrosive environment involved.

Electrostatically Grounded

For applications in which fiberglass products are handling gas fumes that are not only corrosive but also potentially explosive, the equipment should be specially constructed to control and remove static electricity. Interior airstream surfaces can be coated with a “carbon rich” resin coat.

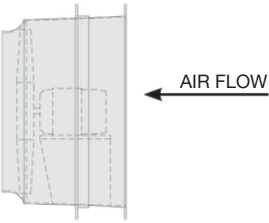
A grounding lug is provided for use at the time of installation.

ASTM D4167-21 Construction

(ASTM D4167-21, Standard Specification for Fiber-Reinforced Plastic Fans and Blowers.) For corrosive systems where ASTM construction is specified this construction option adds: synthetic veil and electrostatically conductive surface coating applied to airstream housing and impeller surfaces, special nameplates, and special final dynamic balancing to fan.

Mounting Flange

Constructed of solid fiberglass, the flange allows the fan to be mounted in the wall opening at the customer’s specified depth. It is permanently mounted to the fan at the factory per customer specified location or it can be shipped loose if a location is not specified.



Shutter Mounting Boot

Constructed of solid fiberglass, the boot is molded to the fan housing at the factory, and is used to ensure proper spacing between the fan and the optional shutters.



Fiberglass Shutter

Constructed of solid fiberglass, shutters are available in end or center pivoted and either automatic, manual, or motor operated. Epoxy coated steel shutters, or shutters constructed of galvanized steel, stainless steel or aluminum are also available.

The Hartzell solid fiberglass automatic back draft damper is constructed entirely of fiberglass, minimizing corrosion problems associated with metal in the airstream. These shutters are available in standard sizes to match the Hartzell shutter mounting boot. These shutters are also available built to specified customer dimensions. Contact your local Hartzell representative for assistance.



Series FEP
Fiberglass
End- Pivoted
Automatic Shutter

Wall Ventilator Guards

304 stainless steel front guards, FRP rear guards and FRP shutter boot guards are available.

CAUTION: The drive assembly or the periphery of the blades of a fan less than seven (7) feet above the floor or working level must be guarded to be in accordance with OSHA regulations.

Performance Guaranteed



Your products are only as good as the components that go into them. We know you have high expectations, and so does Hartzell Air Movement. We know you expect the most reliable and durable industrial air movement products available, so we’re holding ourselves to a higher standard. We’re so sure that our products will out-perform industry standards, we’re backing that promise with the industry’s first – and only – five-year warranty.

At Hartzell, these are words we live by. They guide us every day. Good enough isn’t how you design your products. It’s not how we engineer, build and support our products — or provide ongoing service to our customers. When we looked at the industry standard two-year warranty, we knew we had to do better. And we did — by offering the Hartzell **FIVE-YEAR WARRANTY**.

Fiberglass Centrifugal Exhausters

Hartzell Fiberglass Centrifugal Exhausters provide a low profile roof or wall exhaust solution in both downblast and upblast configurations. They provide a major advantage for general ventilation applications where concentrations of corrosive elements exceed the limits of

standard fans. The fiberglass construction is not only resistant to corrosive elements, but also provides additional advantages such as weight, high strength to weight ratio and dimensional stability.

Standard Construction

- **Construction** – All structural parts in the airstream are either fiberglass resin or epoxy coated stainless steel. All fiberglass surfaces are protected with a minimum 10-mil thickness of chemical, flame, and ultraviolet resistant resin.
 - **Housing** – Constructed of fiberglass and a corrosion resistant vinylester resin with a Class I flame spread rate of 25 or less
 - **Wheels** – Constructed of fiberglass and a corrosion resistant vinylester resin with a Class I flame spread rate of 25 or less
- **Hardware** – All internal hardware (airstream) is Type 304 stainless steel. All internal hardware (out of airstream) is zinc plated.
- **Shaft Seal** – A fiberglass and neoprene shaft seal is placed where the shaft leaves the housing.
- **Wiring Access** – Conduit tube between the motor enclosure and the curb panel provides wiring access without an additional roof penetration.

Type FE Wheel

The Type FE wheel is unique in the fan and blower industry. It is manufactured as a single fiberglass piece using a multi-section RTM mold, ensuring that each wheel is aerodynamically identical and provides reliable, repeatable performance without the variability of hand-made and taped components. The superior design is a result of a substantial investment in research, development, tooling, and manufacturing methods by Hartzell Air Movement.

FEATURES: Type FE wheels are highly efficient with a tapered inlet side and airfoil blades and have a non-overloading horsepower characteristic curve. When used in conjunction with a precision inlet cone it efficiently moves large volumes of air at high pressures with low noise characteristics at low RPM.

CONSTRUCTION: Type FE wheels are solid fiberglass, die formed and molded with Derakane 510-A corrosion resistant vinylester resin. The fiberglass resin has a Class I flame spread rate of 25 or less. Special constructions are available for abrasive or extremely corrosive environments.

BALANCING: Each wheel is electronically, statically and dynamically balanced according to the requirements of Fan Application Category BV-3 of AMCA/ANSI Std. 204-20. Each wheel is also operationally tested and inspected before shipment.

Hartzell offers the ONLY fiberglass wheel available in a solid, one-piece design from the mold.

- ✓ Solid, one-piece design from an RTM mold – up to 60" diameter
- ✓ Highly efficient with a tapered inlet side and airfoil blades
- ✓ Non-overloading horsepower characteristic curve
- ✓ Available in 12" - 40" diameters for Series 82, 83, 87 and 88
- ✓ Available in clockwise rotation



Options and Accessories | Series 82, 83, 87 and 88

ASTM D4167-21 Construction

(ASTM D4167-21, Standard Specification for Fiber-Reinforced Plastic Fans and Blowers.) For corrosive systems where ASTM construction is specified this construction option adds: synthetic veil and electrostatically conductive surface coating applied to airstream housing and impeller surfaces, special nameplates, and special final dynamic balancing to fan.

Optional Heavy-Duty Dampers

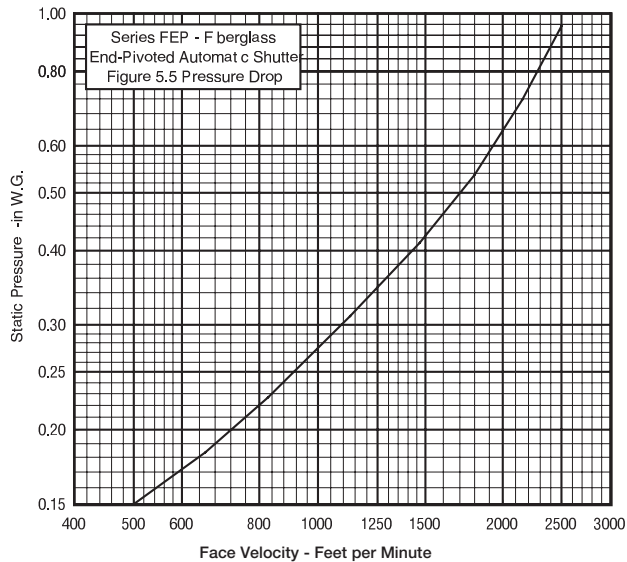
The Hartzell Series FEP are end-pivoted, gravity backdraft shutters constructed entirely of fiberglass.

- Maximum Temperature: 200°F
- Maximum Face Velocity: 2,500 FPM
- Maximum Differential Pressure: 1" W.G.
- Shipped loose for field mounting in roof curb.



Series FEP
Fiberglass
End-Pivoted
Automatic Shutter

Performance Data



Series 88 Fiberglass Exhauster with Custom FRP Base

Disconnect Switch

Shipped loose for field mounting.

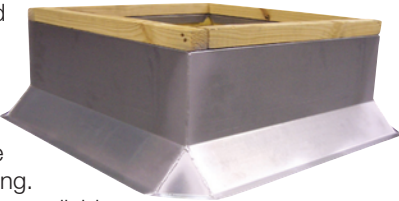
Bird Screen

304 stainless steel birdscreen available on all exhausters.

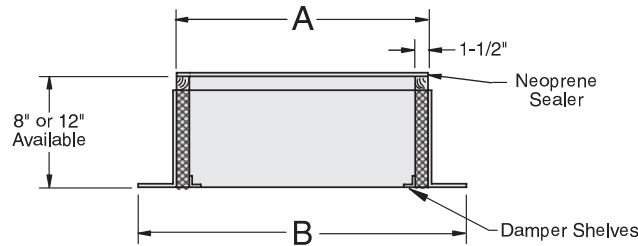
Prefabricated Curbs

The CT-1 fiberglass prefabricated curb shown is for flat roof installation of Hartzell centrifugal exhauster. The curb is designed for metal, concrete or wood roof decks that are not surface insulated. The curb is available either 8" or 12" high.

Model IRC-1 prefabricated curb constructed of galvanized steel is also available with identical features as Model CT-1. Galvanized models can be furnished with epoxy coating. Aluminum construction also available.



All prefabricated curbs can be furnished for slope or peak bases. Prefabricated curbs are designed to support the weight of the fans cataloged herein and attachments not exceeding over 100 additional pounds in a 40 mph wind. Nonstandard curb construction is available.



Principal Dimensions (in.) – Series 82, 83, 87, 88

Fan Size	12	15	18	24	30	36	40
B	19 1/4	23 1/4	29 1/4	29 1/4	35 1/4	41 1/4	47 1/4
	27 1/4	31 1/4	37 1/4	37 1/4	43 1/4	49 1/4	55 1/4

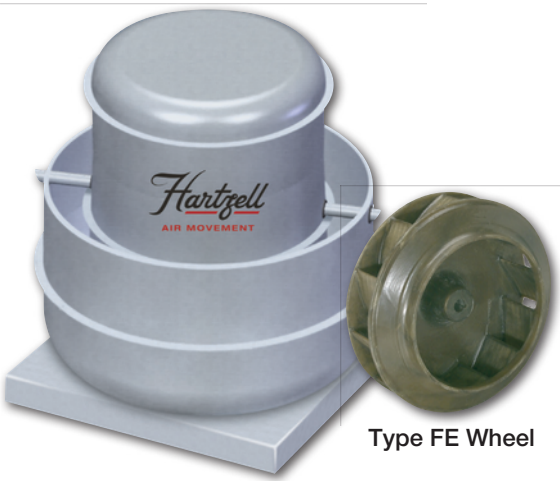
Series 82 & 83 (Downblast) Series 87 & 88 (Upblast) Fiberglass Exhausters

Features:

- **Applications** – Examples include paint and chemical storage facilities, gas transmission pump houses, battery charging facilities and wastewater/odor control pumping stations.
- **Sizes** – 12" to 40"
- **Performance** – 500 to 22,000 CFM
- **Temperature** – Suitable for temperatures up to 125°F
- **Motor** – Direct drive motors are standard with an extended shaft. Belt drive motors are standard t-frame. Motor and drive components are protected from the airstream and include internal isolation to minimize vibration. They are available in single or three phase, with two-speed and explosion proof motors available on some models.
- **FRP Materials** – The dome ventilators consist of a fiberglass housing, fiberglass curb cap, and fiberglass motor cover all constructed of vinylester resin. The solid fiberglass wheel is molded with Derakane 510-A corrosion resistant vinylester resin. The unit has a formed fiberglass venturi inlet and outlet. All airstream hardware is 304 stainless steel.
- **Type FE Wheel** – High efficiency, solid fiberglass wheel built in one piece using a multi-section mold. This process insures repeatability and provides sealed, stronger joints. The tapered inlet side and airfoil design efficiently moves large volumes of air at high pressures. The wheel has a non-overloading horsepower characteristic curve.

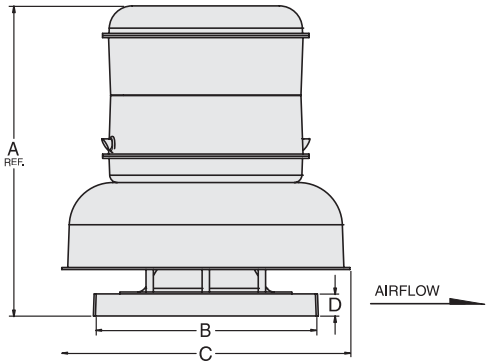


Series 82 (Direct Drive)
Series 83 (Belt Drive)



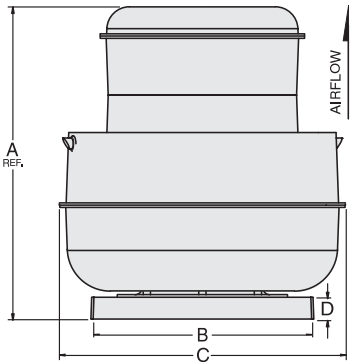
Series 87 (Direct Drive)
Series 88 (Belt Drive)

Dimensions



Principal Dimensions (inches) –
Series 82 & 83 Downblast

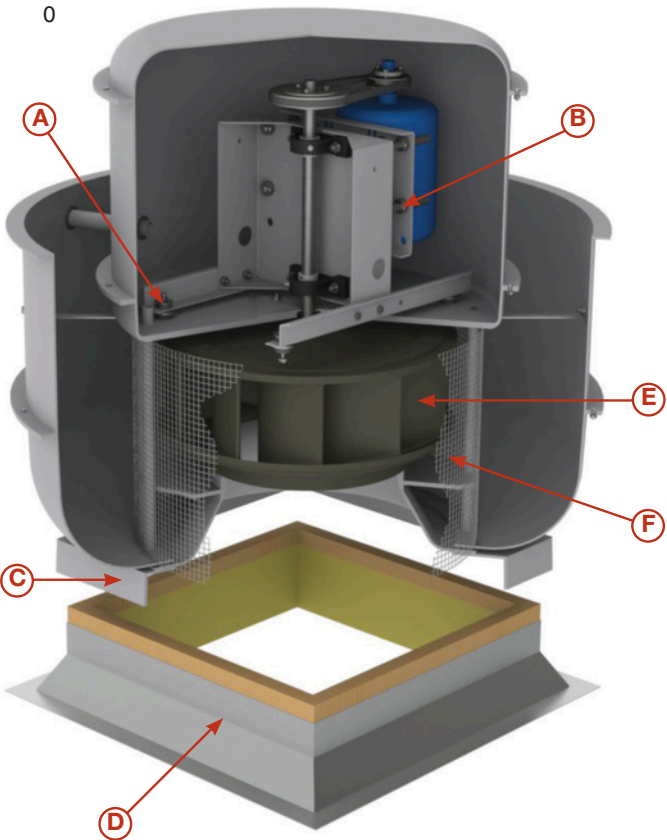
Fan Size	A _(Ref)	B	C	D
1	32 ⁷ / ₁₆	20	30	2
2	33 ⁷ / ₁₆	24	34 ⁷ / ₈	2
1	42 ¹ / ₂	30	38 ¹ / ₈	3
5	46	30	39 ¹ / ₈	3
1	55 ⁷ / ₈	36	44 ¹ / ₄	3
8	60 ¹ / ₄	42	49 ⁵ / ₈	3
2	60 ¹ / ₂	48	54 ³ / ₈	3
4	63 ³ / ₈		58 ¹ / ₈	
3	63 ³ / ₈		64 ⁵ / ₈	
0	64 ⁵ / ₈		64 ⁵ / ₈	
6	64 ⁵ / ₈		64 ⁵ / ₈	
8	64 ⁵ / ₈		64 ⁵ / ₈	
4	64 ⁵ / ₈		64 ⁵ / ₈	
0	64 ⁵ / ₈		64 ⁵ / ₈	



Principal Dimensions (inches) –
Series 87 & 88 Upblast

Fan Size	A _(Ref)	B	C	D
1	32 ⁷ / ₁₆	20	30	2
2	33 ⁷ / ₁₆	24	34 ⁷ / ₈	2
1	42 ¹ / ₂	30	38 ¹ / ₈	3
5	46	30	39 ¹ / ₈	3
1	55 ⁷ / ₈	36	44 ¹ / ₄	3
8	60 ¹ / ₄	42	49 ⁵ / ₈	3
2	60 ¹ / ₂	48	54 ³ / ₈	3
4	63 ³ / ₈		58 ¹ / ₈	
3	63 ³ / ₈		64 ⁵ / ₈	
0	64 ⁵ / ₈		64 ⁵ / ₈	
3	64 ⁵ / ₈		64 ⁵ / ₈	
8	64 ⁵ / ₈		64 ⁵ / ₈	
4	64 ⁵ / ₈		64 ⁵ / ₈	
0	64 ⁵ / ₈		64 ⁵ / ₈	

Series 88 Cross-Section View



- A. Vibration Isolator**
Reduces vibration and noise transfer between drive system and fan housing.
- B. Drive Tensioning Bolts**
Provides easy method to adjust belt tension.
- C. Curb Panel**
Integral adapter to aid in securing the fan to a roof curb.
- D. Prefabricated Roof Curb (Optional)**
Fiberglass prefabricated roof curbs are designed for metal, concrete or wood roof decks that are not surface insulated. They are available for flat, slope or peak roof installation in 8" or 12" heights. Custom curb construction is also available.
- E. Type FE Wheel**
Highly efficient, solid fiberglass wheel, built in one-piece using a multi-section mold, with a tapered inlet side, airfoil blades and a non-overloading horsepower characteristic curve. Available in clockwise rotation.
- F. Birdscreen (Optional)**
Stainless steel guard protects fan from birds and large debris.



Series 88 Fiberglass Exhauster with Electrostatic Grounding and Hoods

For performance data, please visit
www.hartzellflow.com or contact your
local sales representative.



Hartzell Air Movement certifies that the Series 82 Fiberglass Direct Drive Downblast Exhausters, Series 83 Fiberglass Belt Drive Downblast Exhausters, Series 87 Fiberglass Direct Drive Upblast Exhausters, and Series 88 Fiberglass Belt Drive Upblast Exhausters, shown herein are licensed to bear the AMCA seal for sound and air performance. Ratings are based on tests and procedures performed in accordance with AMCA Publication 211 and Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. For performance and sound data, please visit www.hartzellflow.com or contact your local sales representative.

Temperature values shown are for immersion or condensate contact applications. Where temperature values are shown, resin is suitable for hood and duct type applications for the full operating temperature range of the product. See product specifications for materials of construction and maximum operating temperature limits.

NOTES: * Special shaft and hardware required, contact factory.
 ** Special design considerations required (explosive environment), contact factory.
 *** Temperature values shown for fiberglass resins are for immersion or condensate contact applications.

KEY G= Good F = Fair NR = Not Recommended
- = Unknown S = Synthetic Veil Required (HiCor) SS = Double Veil

OTHER PRODUCTS INCLUDE:



More than 50 Hartzell representative offices can provide specific performance and installation data to meet your requirements. Call your Hartzell Air Movement representative for assistance. Visit www.hartzellairmovement.com or call 800.336.3267 for the name of your representative.



www.hartzellairmovement.com

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