Industrial Fans

Energy efficient climate control revolves around this simple design.



HH

A change is in the air

The high volume, low speed (HVLS) fan is designed to circulate the air in your facility more efficiently and effectively.

Rotating at an optimized low speed, a Rite-Hite® HVLS fan moves the most air over the largest area at the lowest cost. This allows for maximum cooling and "destratification" (the process of keeping the temperature consistent from floor to ceiling), reducing a facility's energy consumption by up to thirty percent.

Consult Rite-Hite for specific fan applications including:

- » Distribution Centers
- » Manufacturing Facilities
- » Warehouses
- » Athletic Facilities
- » Airports
- » Convention Centers
- » Health Clubs
- » Schools/Universities
- » Retail
- » Stadiums

- » Arenas
- » Auto Dealers
- » Lobbies/Atriums
- » Libraries
- » Religious Facilities
- » Hotels
- » Theaters
- » Bars/Restaurants
- » Hospitals
- » Hundreds of Other Applications



Cost savings at every turn

Experience increased comfort and productivity.

HVLS fans gently move air at an optimized speed over people, so they stay cool, comfortable and productive in the summer. In the wintertime, the same fan keeps everyone comfortable by pushing the warm air from the ceiling down to the floor.

Enjoy greater energy efficiency and cost savings

Our large Rite-Hite HVLS fan costs just pennies an hour to operate. By switching from highspeed fans to a Rite-Hite fan, you can replace up to 20 traditional floor or wall mounted fans.



Year-round energy savings

A space without an HVLS fan will have uneven temperature zones that waste energy dollars. The hot air accumulates at the ceiling and the cold air will sink to the floor, making your HVAC system inefficient and increasing your energy consumption.



Save money in the winter

An HVLS fan operating during winter will mix the warmer air at the ceiling with the cooler air at the floor to even the temperature throughout the space. This process is called "destratification." The fan gathers the warm air and pushes it down in a conical shape until it reaches the floor. It then flows out horizontally in all directions, filling the space. This can reduce a facility's energy consumption by up to 30%.



Save money in the summer

Operating in the same space during the summer, an HVLS fan will circulate the air, making it more comfortable, by decreasing the effective temperature by 7°F or more. It's the ideal supplement to your air conditioning because it allows you to raise your settings as much as 4°F with little change in comfort. That means you'll reduce your summertime energy consumption by as much as 20%.

The HVLS standard

Rite-Hite Fans set the HVLS standard thanks to four key features.

Performance

- » Rite-Hite's fans provide the greatest airflow of all HVLS fans on the market
- » Rite-Hite fans help to improve productivity by reducing effective temperatures
- » The upward tilt of the blades creates uniform airflow while the blade taper eliminates pockets of stagnant air under the center of the fan for comfortable climate throughout the space



Source: NASA Report CR-1205-1 "A compendium of Human Responses to the Aerospace Environment"







Construction

- » Each Rite-Hite HVLS fan features an extruded, precision-milled aluminum hub and bolt
- » Vibration-dampening material is incorporated to reduce stress to the hub by fifty to seventy-five percent
- » The blade and hub are rotationally balanced for smooth, efficient performance
- » Every fan is backed by Rite-Hite's fifty-year track record as an industrial manufacturer

Safety

- » All fans feature a three-way motorto-hub safety connection, as well as stabilizing cables, a beam clamp and motor housing
- » A unique safety ring is provided for back-up security for the motor to hub connection. Each hub "blade arm" is connected to the safety ring

Design

- » Rite-Hite's exclusive Propell-Aire™ aluminum blade incorporates tilt, taper and twist to produce consistent airflow across the entire length of the blade
- » Rite-Hite fans are available in 8-foot to 24-foot diameters
- » Custom colors and logos are available

Generate big savings in big spaces



Worldwide, HVLS fans provide comfort, efficiency and more

- » A Florida airplane hangar keeps technicians cool, and prevents birds from nesting above the airplanes
- » Food spoilage was eliminated by keeping the temperature consistent from floor to ceiling in a Wisconsin food distribution warehouse
- » A metal recycling plant in Alabama prevented rust from forming on expensive metals
- » An Amsterdam flower exporter prevented product damage by eliminating cold zones within their facility
- » A beverage distributor in Minnesota dissipated fumes in the company's drive-thru facility
- » Reduced the number of evaporative coolers used by 50% during the summer in a Nevada Distribution Center

Rite-Hite HVLS Fans move air up to 85 feet from the center of the fan in all directions, which lowers energy costs and increases comfort in large facilities.

It also runs quieter than a high speed-fan, reduces condensation on floors and products and improves overall indoor air quality. Consult a Rite-Hite representative for complete details.









The fan that started the Revolution.

The Revolution[®] is Rite-Hite's original HVLS fan, and today's standard for low-cost, high-efficiency climate control, delivering the most air movement of any HVLS fan on the market.

Featuring blade diameters up to 24 feet, the Revolution is ideal for large facilities with high ceilings.

Installing the Revolution is a smart, economical, green choice for a new building or a simple upgrade to any existing facility.

- » The Revolution fan provides airflow up to 420,000 CFM
- » The high performance design covers 22,000 sq. ft., moving air up to 85' in all directions from the center of the fan

HVLS fans can be used in hundreds of applications » Health clubs

» Manufacturing facilities

» Warehouses

farm buildings

» Barns and

» Airports

- » Athletic facilities
- » Distribution centers » Schools
 - and universities
 - » Retail stores
 - » Shopping malls
 - » Auto dealerships
 - » Lobbies and atriums
- » Convention centers » Stadiums and arenas

- » Libraries
 - » Hospitals
 - » Religious facilities
 - » Hotels
 - » Theaters
 - » Bars
 - and restaurants
 - » And many, many more





The Rogue[®], a cost-effective alternative to the Revolution[®].

The Rogue[®] is Rite-Hite's original twoblade HVLS fan and sets the standard for low-cost, energy efficient climate control.

It provides the same benefits of the Revolution with slightly less airflow. Featuring blade diameters up to 24 feet, it's ideal for large facilities with high ceilings where destratification is the primary objective.

- » The Rogue fan provides airflow up to 315,000 CFM
- The high performance design covers 22,000 sq. ft., moving air up to 85' in all directions from the center of the fan



"Destratification" is the secret to efficient indoor climate control.

The temperature in any large space is naturally uneven making HVAC systems inefficient to cool or heat the facility. A Rite-Hite HVLS fan can reduce HVAC costs by some twenty to thirty percent through a process called "destratification."

The HVLS fan gathers the warm air at the ceiling and pushes it down in a conical shape until it reaches the floor. There the air flows out horizontally in all directions, filling the space and equalizing the temperature throughout the facility. In the summertime this can reduce air conditioning costs by as much as twenty percent, and in the wintertime it can cut the same facility's energy consumption by up to thirty percent.

Warm air

Warm air gets trapped below the ceiling of the building (represented by the bright colors).

Cool air

The cooler air collects at floor level of the building (violet and blue colors).

Building with Fans turned off



Same building with Fans running for 15 minutes



(Note: The three bright spots are lights mounted below the ceiling.)





The Renegade[®] stands apart from all other HVLS fans.

If you have limited ceiling space in your facility, overhead obstructions that prevent you from installing a ceiling fan or make occasional changes to the configuration of your plant or facility, then you have to go Renegade[®].

The newest member of the Rite-Hite line, this floormounted HVLS fan offers the same benefits as the original Revolution fan.

- » Available in 8-foot to 16-foot diameters
- » Pre-wired, so you can plug it in and turn it on
- » AC motor uses 100 to 800 watts, costing just pennies per hour to operate
- » Integral shock sensor shuts down fan if impacted
- » Designed for interior and exterior use



Adjustable height up to 12 ft.



The simple control features touch pads for power, direction and speed settings.



Optional SureStop[™] safety barrier protects the column from accidental impacts.





The Rave[®] delivers comfort to smaller spaces.

The Rave[®] is a four-blade HVLS fan that is perfect for spaces where aesthetics are important.

Available in 8-, 10- and 12-foot diameters, the Rave takes comfort to new highs and costs to new lows. It's form and function in perfect balance.

- » Available in 8-foot to 12-foot diameters
- » Polished aluminum blades, feature our exclusive Vortex tip, combining style with performance
- » Custom colors are available for the Rave
- » Ideal for supplementing air conditioned facilities







Control up to 18 fans from a single location

The optional Fan Commander[®] is a touch screen control station that allows for operation of up to 18 Rite-Hite HVLS fans from one location.

Divided into three zones, the Fan Commander allows for turning fans on/off, speed adjustment and scheduling independently or within a zone. Optional modbus port for easy interface with networked computers, tablets, smartphones or building management systems.

Additional features include:

- » Control fan operation based on temperature within a facility
- » Password protection prevents unauthorized adjustment of settings
- » Each fan can be identified by specific location for accurate control
- » Troubleshoot all fans from a single location

Standard Controls

Each Rite-Hite fan fan includes a membrane touch pad control box with on/off speed adjustment and forward/reverse settings. The compact box fits into a standard electrical housing and is capable of operating up to 4 fans identically.







Coolman[®] High-Volume/High-Speed (HVHS) Fan

Fans where and when you need them.

Performance

- » Improve productivity by reducing effective temperatures
- » Coolman[®] HVHS fans are commonly used to spot cool warehouses, assembly lines, loading docks, machine shops, bakeries, laundries, gymnasiums, and auto repair facilities
- Our application engineers are trained to use strategic planning to apply HVLS and HVHS fans in a way that

will maximize performance and airflow in your facility, while giving you year round comfort and results you desire

Construction

- » Available as Portable Floor Fan, Portable Floor Fan with 90° Tilt, and Ceiling Column Mount with 90° Tilt and 360° Swivel
- » Durable 18-22 gauge steel barrel, with polyester powder coat bronze finish
- » Diameters from 36" to 48" CUJus
- » Also available in 60" diameter
- » Four red blades engineered with an airfoil design featuring tilt, taper, and twist
- » Electrical plug-in design, with 10' grounded 3 conductor cord
- » 115 volt, 60 hertz, single phase, single or two speed motor
- » Switches, handles, and knobs all conveniently located for easy positioning
- » Supportive, heavy gauge steel tube

Operation

- » Single or two speed operation
- » 2 mph air movement up to 90' away
- » Belt drive for quiet, lower decibel operation
- » Industrial grade, belt driven design, with automatic tensioner for easy service and repair

Warranties

» 1 year warranty



			36"		42		2"		48"	60"
Distance	Distance Air Speed		Тwo		Cinala		Two			Circula
from Fan	(mph)	Single	High	Low	Single		High Lo		Single	Single
		0.5 HP	0.5	HP	0.5 HP	0.75 HP	0.5	HP	1.0 HP	1.5 HP
30'-0"	Zone 1	3.6	3.6	1.4	4.1	5.3	4.1	2.0	5.8	7.7
50'-0"	Zone 2	2.8	2.8	NM	3.0	3.3	3.0	1.1	3.6	5.4
70'-0"	Zone 3	2.3	2.3	NM	2.3	2.5	2.3	NM	3.0	4.4
90'-0"	Zone 4	2.0	2.0	NM	2.0	2.1	2.0	NM	2.4	3.3



Fan planner

It's more of an art than a science

Our application engineers are trained to use strategic planning to apply HVLS and HVHS fans in a way that will maximize performance and airflow in your facility, while giving you year round comfort and results you desire.

When placing a Rite-Hite HVLS fan, larger diameter fans will move air further down rack aisles and over some obstructions. Smaller diameter fans can be most effective in specific work or activity areas, or where installation space is limited. Each Rite-Hite fan has minimum overhead clearance requirements based on the fan's diameter. The smaller the fan diameter, the closer it can be mounted to the ceiling.

Place the fan to minimize airflow obstructions and provide the greatest cooling effect to the most people. When possible, keep blade tips at least two fan blade lengths from walls and solid obstructions. Center the fan in a light or sprinkler grid when possible (for example, a 12-foot diameter fan fits into a 10-foot grid).

Contact your local Rite-Hite representative to evaluate your specific application, and be sure to ask about Rite-Hite's exclusive trial installation program.

The best way to evaluate a Rite-Hite fan is by trying one out in your facility.

Use HVHS fans to compliment HVLS fans when configuring airflow in aisles or tight spaces.





The high performance design covers 22,000 sq. ft., moving air up to 85' in all directions from the center of the fan.

ANSI/AMCA Standard 230-07

- » All fans were tested and third party certified to 230-07 standards
- » When used for cooling people, choose a fan that moves air a minimum of 2 mph in the targeted zones
- The minimum air speed needed for destratification is 1/2 mph







80

Use industry standards to compare fans

When used for cooling people, choose a fan that moves air a minimum of 2 mph in the targeted zones. The minimum air speed needed for destratification is 1/2 mph.



Air Speed	2	4'	2	0'	10	6'	1	2'	٤	8'	
Miles Per Hour	Full Power	Half Power									
Zone 1	6.8	2.8	5.7	2.8	5.9	3.1	4.8	3.1	4.5	2.3	
Zone 2	4.4	1.9	3.4	1.7	4.0	1.7	2.8	1.1	2.3	.8	
Zone 3	2.9	1.4	2.7	1.4	2.7	1.1	2.3	.8	2.0	.6	
	2.3	.8	2.1	.8	2.1	.6	2.0	NA	1.6	NA	
Full Power CFM	420,	000	315,0	000	225,	000	150,0	000	80,0	000	





Air Speed	2	4'	2	D'	16'		1:	2'	٤	3'
Miles Per Hour	Full Power	Half Power								
Zone 1	4.7	1.6	3.6	1.5	3.4	1.4	3.0	1.4	2.3	1.0
Zone 2	2.5	1.1	2.4	1.1	1.6	1.1	1.5	1.1	1.1	.8
Zone 3	2.3	1.1	2.3	1.1	1.5	.9	1.5	.6	.8	.6
	1.1	.6	1.1	.6	1.1	.6	.8	NA	.6	NA
Full Power CFM	315,	000	240,	000	175,0	000	125,0	000	70,0	000





Air Speed	10	5'	12	2'	8'		
Miles Per Hour	Full Power	Half Power	Full Power	Half Power	Full Power	Half Power	
Zone 1	5.2	2.6	4.2	2.1	4.0	2.0	
Zone 2	2.5	1.3	2.5	1.3	2.3	1.1	
Zone 3	2.0	1.1	1.9	1.0	1.7	.7	
Full Power CFM	130,0	000	100,	000	50,0	000	



Zone 1 Within diameter of fan blades Zone 2 25' from fan center (1,950 sq. ft.) Zone 3 50' from fan center (7,800 sq. ft.)



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- » All fans were tested and third party certified to 230-07 standards
- » When used for cooling people, choose a fan that moves air a minimum of 2 mph in the targeted zones
- » The minimum air speed needed for destratification is 1/2 mph



Air Speed	1:	2'	1(0'	8'		
Miles Per Hour	Full Power	Half Power	Full Power	Half Power	Full Power	Half Power	
Zone 1	4.1	2.5	4.0	2.3	3.9	2.2	
Zone 2	1.5	1.1	1.1	.6	.9	.6	
	1.3	.9	1.1	.6	.9	NA	
Full Power CFM	100,0	000	75,0	000	50,	000	



450 lbs

HVLS Fans | RiteHite.com | 15

8', 12', 16'	Diameters	8', 10', 12'
Aluminum	Blades	Aluminum
Mill-finish standard, custom colors optional	Blade Finish	Polished standard, custom colors optional
4	# of Blades	4
Up to 130,000 (12' diameter, 4 blade)	CFM	Up to 100,000 (12' diameter, 4 blade)
3/4 hp	Motor	3/4 hp
120, 230	Voltages	120, 230, 400, 460
1	Phase	1 or 3
2.9A @ 230V	Motor FLA*	2.9A @ 230V
100 – 800	Watts	100 – 700
50 or 60 Hz	Frequency	50 or 60 Hz
Up to 7,800 sq ft, 50' from the fan's center in all directions	Coverage	Up to 7,800 sq ft, 50' from the fan's center in all directions
Less than 63 dBA depending on fan speed (measured 12' below and 20' from the fan's center)	Decibels	Less than 50 dBA depending on fan speed (measured 20' below and 20' from the fan's center)
Up to 5 mph at full speed	Air Speed	Up to 4 mph at full speed
Variable speed	Controls	Variable speed
Floor mounted up to 12'	Mounting Heights	10' to 30' from finished floor to bottom of blade

Weight

150 lbs

Diameters

Blades

Blade Finish

of Blades

CFM

Motor

Motor FLA*

Watts

Coverage

Decibels

Air Speed

Controls

Mounting Heights Weight

8', 12', 16', 20', 24'

230, 400, 460, 575

Mill-finish standard, custom colors optional

Less than 63 dBA depending on fan speed

(measured 20' below and 20' from the fan's center)

15' to 80' from finished floor to bottom of blade

Up to 315,000 (24' diameter, 2 blade)

Aluminum

2

2.0 hp

1 or 3

3.0 @ 460V

100 - 1200

50 or 60 Hz

Variable speed

260 lbs

Up to 5 mph at full speed





FROM RITE-HITE FANS





Aluminum

4

2.0 hp

1 or 3

3.0 @ 460V

100 - 1700

50 or 60 Hz

Variable speed

300 lbs

Up to 7 mph at full speed

230, 400, 460, 575

Mill-finish standard, custom colors optional

Up to 22,000 sq ft, 85' from the fan's center in all directions

Less than 63 dBA depending on fan speed

(measured 20' below and 20' from the fan's center)

15' to 80' from finished floor to bottom of blade

Up to 420,000 (24' diameter, 4 blade)









Rite-Hite[®] Fan Warranty

WARRANTY CERTIFICATE

3-YEAR PARTS AND LABOR

Warranties are one component to consider when purchasing an HVLS fan.

Rite-Hite Fans is committed to manufacturing the highest quality product and is supported by the best installation and service network in the industry.

When selecting a product, make sure to read and understand the "fine print". Long warranties may look attractive on paper, but items like troubleshooting, lift rental, component removal, freight and re-installation costs may not be covered by some companies.

Rite-Hite Fans stands behind our products not only with warranties, but with factory technical support and local sales and service representatives throughout the lifetime of your product.



3-year Parts and 3-year Labor Warranty

Rite-Hite covers the motor and electrical controls for three (3) years from the date of shipment.



10-year Structural Integrity Warranty

Rite-Hite has the strongest blade-to-hub connection on the market, and accomplishes this with a vibration-absorbing material to reduce stress to the hub by 50 to 75%. The 10 year-Structural Integrity Warranty covers the blade-tohub connection if it fails to perform as designed.



Lifetime warranty on workmanship of blades and hub

Rite-Hite has the best design for HVLS fans. The complex shape of the blades and extruded, precision-milled aluminum hub are robust and superior in design. The Lifetime Warranty covers workmanship and defects to the blade or hub.

SPECIAL S	BCNI
HONEYBACK GUARANTEE C	N CUSIOMIR SATISFACTIC
Carrent	Eggerers Cound
Automotion	· · · · · · · · · · · · · · · · · · ·
The of incidence	Paritive Plan
CARDATE: Is addition to id other sur- cents percentariate of the distribution of the lightenet assessed in the parameter. Not the Copyrection survaviate that the hydrowest off percentaria a percent of the analysis is the contents for a percent of the analysis of the fragment of the collision. I the	 8 within the 12 result game do touteum requirement applica- tion of the performance of the the content and the draminate press, pay the the draminate gat the performance

1-year Customer Satisfaction Money-Back Guarantee

Choose an Industry Leader

Rite-Hite continues to be an industry leader in providing solutions for improving safety, increasing productivity and reducing energy costs at industrial and commercial facilities worldwide.

Local Expertise

Installation of your HVLS fan is critical to its proper operation. Determining the location of your Rite-Hite Fans is now even easier using our exclusive Fan Planner. Our local specialists can quickly measure an area and recommend the fan diameter and blade configuration that will help maximize productivity and reduce energy costs. Online stores and catalogs or companies with multi-state "regional" managers may not have the ability to deliver the results you expect and deserve.

Our local representatives are factory trained for installation, troubleshooting, and placement. If you are an existing Rite-Hite customer, planned maintenance and routine check-ups can be coordinated in one service call.

Manufacturer's Support

A global manufacturer with over 50 years of experience, Rite-Hite has a superior track record in supporting applications and installations locally and globally. Every Rite-Hite Fan comes with a One-Year Money-Back Customer Satisfaction Guarantee and a 10-Year Structural Integrity Warranty.



The best way to experience how a Rite-Hite Fan can impact your facility is by installing one. Ask your representative how Rite-Hite's Trial Program can make it easy.





Improving industrial **safety**, **security**, and **productivity** worldwide through quality and innovation.

- VEHICLE RESTRAINTS
- LOADING DOCK LEVELERS
- DOCK SEALS AND SHELTERS
- INDUSTRIAL DOORS
- HVLS FANS
- BARRIER SAFETY SYSTEMS
- MACHINE GUARDING SYSTEMS
- INDUSTRIAL CURTAIN WALLS



8900 North Arbon Drive Milwaukee, WI 53223, USA

P 414-355-2600 (800-456-0600)F 414-355-9248

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