Clever Climate!
with

RITE-HITE FANS

XL³™ Fan

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with

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XL³™ Fan

The RiteHite*Fans*-Formula:

XL³ Fan

XL³ Fans perform in 3 directions:
They save money, help to protect the environment and improve the work climate.

How is this done?
Available with diameters up to **7320 mm**, one XL³ Fan can comfortably move air in a radius of up to 26 m in all directions. No building space is too large to benefit from our formula.

Many building types can benefit from the RiteHite*Fans*-Formula:
manufacturing facilities, logistics facilities, fitness centers, convention centers, agriculture farms and any large building spaces that want to benefit from a clever climate …

XL³ HV (Ø 7320 mm)

XL³ Fan

… SIZE MATTERS.

*Our XL³ Fans are designed for **large** building spaces – they move with their unique construction and **large** diameters **large** volumes of air at low speeds (revolutions).*

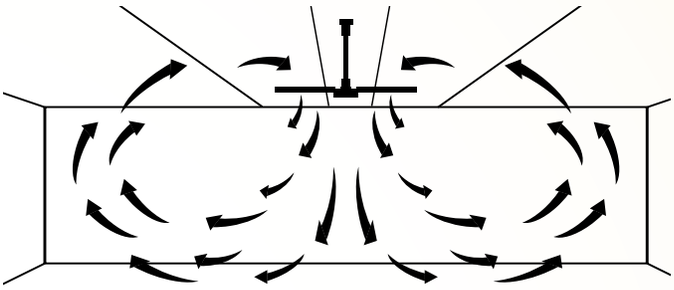
(In the USA and China also known as HVLS fans – High Volume, Low Speed)

XL³ HV, available in following diameters:
2440 mm / 3660 mm /4880 mm / 6100 mm / 7320 mm

XL³ SP, available in following diameters:
2440 mm / 3050 mm / 3660 mm

XL³-KNOW-HOW: HOW DO XL³ FANS WORK?

The air is pulled from above the XL³ Fan and then pushed down in a conical shape to the building floor below. From here the air moves in a horizontal stream away from the center of the fan in all directions. The maximum airflow is distributed below the blades of the fan and spreads out from there. Because of the unique construction and very large diameters, large volumes of air are moved at low speed (revolutions).



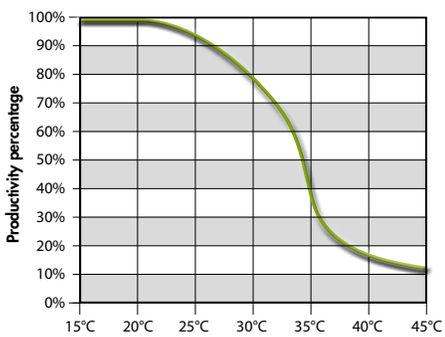
INDEX

Saves money

AN INVESTMENT THAT PAYS OFF

The XL³ Productivity-Effect:

At high temperatures, employee concentration and accuracy will decrease.



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

A perceived temperature decrease of 4°C to 6°C may increase the productivity of employees by 10% to 30%.

The XL³ Summer-Effect:

XL³ Fans are adjustable in speed and will gently pass air over your employees to keep them cooler. Everyone knows the cooling effect of a light breeze on the skin in summer. In addition, an XL³ Fan can supplement existing HVAC* systems. Thermostat set points can be raised a few degrees with no noticeable change in the comfort level, while reducing energy consumption.

As a rule, an increase of the air conditioning control temperature by 1°C will lead to an energy saving of 7%. With XL³ Fans a 1.5°C up to 3°C increase are comfortably possible, leading to potential savings up to 21% in energy costs.

* System for heating, ventilation and air conditioning, whereby the temperature regulation is controlled with thermostats.

The XL³ Winter-Effect:

The traditional situation in building spaces without XL³ Fans: when heating a building, warm air will rise and collect at the ceiling, causing the heating systems to work harder to keep the temperatures at floor level comfortable and consistent. This is an inefficient and costly situation.

XL³ Fans address this problem in a sustainable manner: the warm air is pushed down and is more evenly distributed in large building spaces. Heating systems become more effective, less additional heating is required and the control temperature may be lowered. The operating costs are low, only a few cents per hour. Energy cost savings can reach as high as 30% annually.

"Our employees said their working area has never been as comfortable as it is now. The XL³ Fan moves the warm air from the ceiling to the floor level where it is needed. Previously many employees wore body warmers, which are cumbersome to work in. Today, these are not necessary". The comfort factor is not the only issue. Marcel Dibbes adds "Our heaters do not have to run as much as they did before. The investment in the XL³ Fan has proved to be really worth-while. We expect a Return of Investment of just over 2 years."

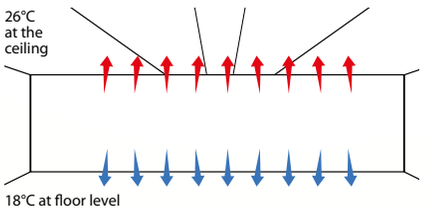
Marcel Dibbes, Ubbink, Doesburg, NL

"Significant savings were achieved – without sacrificing know-how and aesthetics."

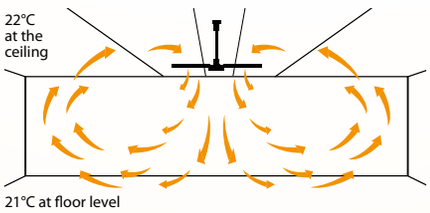
The savings potential:

The traditional situation without XL³ Fans - you are losing money! Heating and cooling large building spaces is difficult and expensive. In the winter, heating systems have to work hard to maintain a comfortable temperature where people are working. In the summer, warm temperatures can create an uncomfortable work environment, jeopardizing safety and productivity. Air conditioning systems are expensive and cause high energy costs.

Without XL³ Fan



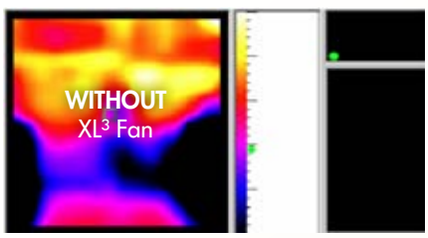
With XL³ Fan



An example of the effects of an XL³ Fan in a typical building in winter.

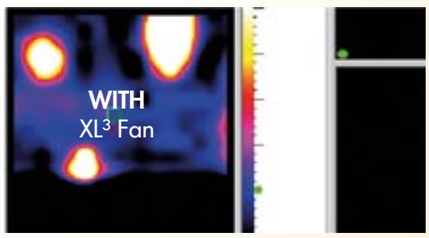
Thermographic images show the efficiency of XL³ Fans

Building with XL³ Fans turned off



Warm air gets trapped below the ceiling of the building *(represented by the bright colors)*. The cooler air collects at floor level of the building *(violet and blue colors)*. The temperature varies by 8°C between floor level and ceiling in a 7600 mm high building! The average temperature at 1525 mm from the finished floor is 18°C.

Same building with XL³ Fans running for 15 minutes



The temperature between floor level and ceiling varies by 0.6°C. The average temperature at 1525 mm from the finished floor is now approximately 23°C.

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

Protects the environment

CONSERVE RESOURCES AND PLAN ECO-CONSCIOUS

Comparison of energy consumption during operation

Fan type	Energy consumption to move 1000 m³ air per hour
XL³ Fan HV	***2.1 – 11.0 W*** (at 1500 W, 9–175 r/min, up to 713585 m³/h)
XL³ Fan SP	***4.4 – 8.8 W*** (at 750 W, 13–120 r/min, up to 169920 m³/h)
 Industrial recirculation fan	32.3 W (at 530 W, 900 r/min, 16410 m³/h)
 Industrial ceiling fan	3.3 W (at 70 W, 230 r/min, 21250 m³/h)
 Industrial axial fan	17.4–27.2 W (at 1125 W, 850 r/min, 14306–64623 m³/h)
 Industrial destratification fan	30.3–54.3 W (at 120–760 W, 800–960 r/min, 3996 - 14004 m³/h)

W= energy consumption in Watt, r/min = revolutions per minute, m³/h = cubic meter air movement per hour.
Further information about the published energy consumptions in the table are available upon request.

The XL³ Energy-Effect:

The design of the XL³ Fan is unique. No other fan can move a comparable volume of air in large building spaces. Based on its light-weight construction, combined with a sophisticated drive system make the XL³ the most energy efficient air movement solution on the market. One XL³ Fan can move the same amount of air as 20 smaller fans at a fraction of the operating cost.

Easily save energy and protect the environment at the same time –
XL³ Fans make it possible!

The environment protection potential:

It is important for many companies to reduce their Carbon Footprint on the planet. The CO_2 emissions from heating, cooling, air conditioning systems and their energy consumption greatly contribute to a company's Carbon Footprint. XL³ Fans help companies to optimize their heating and cooling efficiency, which reduces CO_2 emissions and lowers their Carbon Footprint.

The XL³ CO_2-Effect:

Wasting energy – not with us …

The same effect, which saves costs, also protects the environment at the same time.

In Europe, energy is mostly produced by combustion processes (oil, natural gas, coal). By implication, saving energy means less CO_2 emissions.

In the winter when heating your building, the use of XL³ Fans can lead to energy savings of up to 30%.

In summer, energy savings of up to 21% are possible in air-conditioned buildings.

A low energy usage for operating the fan and less frequent need for operation means: less energy consumption and less CO_2 emissions.

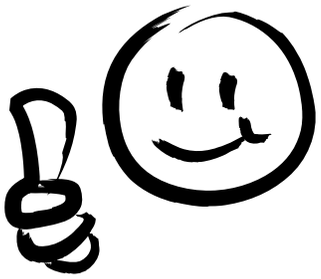
This conserves our natural resources in a sustainable manner, year after year.

After a long lifespan, most components can be recycled …

The XL³ Fans are designed for a very long lifetime:

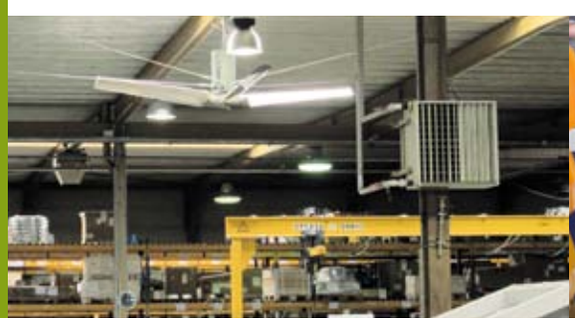
- *Lifetime warranty on blades and hub.*
- *10 Year warranty on steel construction.*
- *3 Year warranty on other parts, including a 1 year warranty on labor costs.*

After 10 years if you want to invest in our current product design - no problem for your green conscious: Almost all components from XL³ Fans are manufactured from recyclable materials and return to the manufacturing process.



Improves work climate

A COMFORTABLE AND COOL ENVIRONMENT



The XL³ Welfare-Effect:

Simply work better with XL³ Fans installed under the ceiling of your building.

With XL³ Fans you save money and you do something good to protect the environment. These are strong arguments, but that is still not all.

Our XL³ Fans improve the work climate in your building in a sustainable manner. The entire year the XL³ provides optimized ventilation - no matter if it is warm or cold outside.

We call this the XL³ Welfare-Effect.

How we create the XL³ Welfare-Effect:

- Stagnation of interior air is prevented, air is circulating
- No unpleasant smells and no cold or hot zones in the building space.
- A pleasant year-round evenly distributed building space temperature (within 1°C temperature difference from floor to ceiling).
- Active cooling, like a light breeze in summer.
- If employees are feeling well in their work environment, the job satisfaction will increase and the productivity will benefit because of improved concentration and accuracy.

The XL³ Health-Effect:

XL³ Fans contribute to keeping your employees healthy. Overheating or under cooling is prevented. Heat accumulation or stagnant air can result in circulation problems, in addition headache, fatigue, lack of concentration or eye irritations are a thing of the past. The risk of getting a cold because of uneven temperature zones in the building is reduced.

"In Industrial buildings like ours, climate control is always a major challenge" Mr. Van Konijnenburg of Bloominess explains. Mr. Van Konijnenburg adds: "Bloominess deals with vulnerable plants and flowers and employees that are positioned at fixed work stations. A safe and pleasant (work)climate needs to be created for our employees and products. Investment in AC systems in this type of large and high building space is simply too costly and not profitable due to the high annual energy costs".

Marco van Konijinenburg, Bloominess, Kudelstaart, NL

"The XL³ Fans produce a very comfortable work climate for our employees."

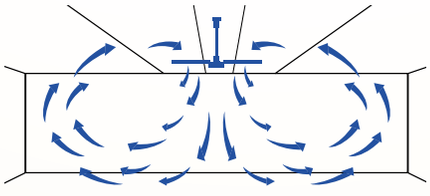
The work climate improvement potential:

Poorly vented buildings can affect the health and productivity of your employees. Too high temperatures, too low temperatures, or uneven temperatures in the work environment in combination with little or no air movement are uncomfortable and unhealthy. Poor ventilation also increases the risk for accidents, because warm, humid air will often condense on floor surfaces which make them slippery and dangerous. The work climate (also in heavily insulated buildings) will benefit from the use of XL³ Fans.

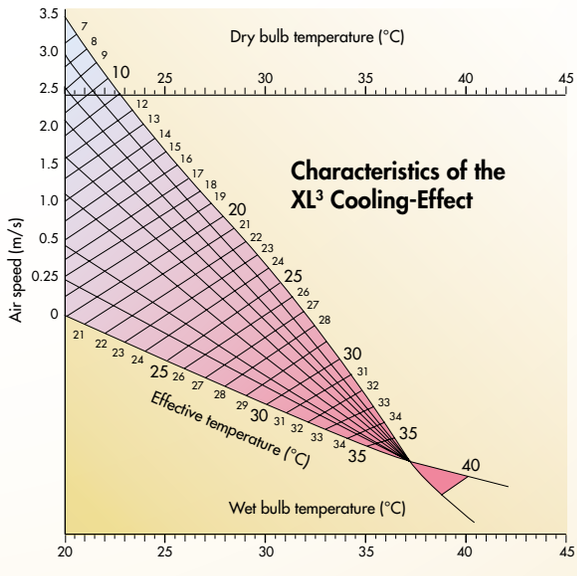
The XL³ Cooling-Effect:

Movement of air on the body accelerates evaporation and creates a cooling effect. The increase in air speed from 0.90 m/s to 1.35 m/s delivers an apparent 4°C to 6°C decrease in building temperature.

With XL³ Fan



With XL³ Fans you can create a cooling effect which equals an apparent decrease in building temperature of 8°C.



Example of characteristics of the XL³ Cooling-Effect:

The effective temperature corresponding to a 25°C wet bulb temperature, a 29°C dry bulb temperature and an air speed of 1.5 m/s is 23°C.

Source: Health and Safety Executive — Prevention of heat illness in mines

DESIGNED FOR LARGE BUILDING SPACES

XL³ FAN HV

Diameter	2440 mm	3660 mm	4880 mm	6100 mm	7320 mm
Model	4 Blades				
Air speed	See Zone Model for air speed, page 17				
Air flow (maximum)	135920 m³/h	254855 m³/h	382280 m³/h	535190 m³/h	713585 m³/h
Revolutions	26–175 r/min	17–115 r/min	13–90 r/min	10–70 r/min	9–60 r/min
Torque (maximum)	407 Nm				
Weight	122 kg	126 kg	129 kg	133 kg	136 kg
Installation height	4575 mm till 24400 mm (measured from finished floor to bottom of blade)				
Unit height (standard)	1305 mm				
Drop tube (standard)	460 mm				
Distance bracket – blade (tip) - At rest position - At full speed	 1065 mm 1065 mm	 1015 mm 940 mm	 965 mm 840 mm	 915 mm 740 mm	 865 mm 635 mm
Minimum height airflow (at full speed)	610 mm	915 mm	1220 mm	1525 mm	1525 mm
Blade	Aluminum mill finish, polished aluminum and colors are optional				
Steel construction	Powder coated, RAL 7005 (Mouse Grey), motor shroud included as standard				
Control system	Variable-frequency drive, Schneider Electric type Altivar, EMC filter and line reactor are included as standard				
Power supply	400V/50Hz/16A, 3Ph/N/E				
Motor specification	1,5 kW, F.L.A. 3,55A, F.L.A. 5,70A (maximum)				
Decibels	40 dBA to 63 dBA depending on the speed, measured 6100 mm below and 6100 mm from the fan's center away				
Coverage	Up to 2046 m², 26 m from the center of the fan in all directions				
Warranty	Lifetime warranty on blades and hub 10 Year warranty on steel construction 3 Year warranty on other parts, including a 1 year warranty on labor costs				
Approval CE	European directives: 2006/42/EG, 2006/95/EG, 2004/108/EG European standards: EN 60204-1, EN 12100-1, EN 12100-2, EN 13857, EN 349, EN 954-1				

The XL³ Fan **HV** (**H**ighest **V**olume) moves more air than any other fan on the market.

XL³ Fans are available in 5 diameters: 2440 mm, 3660 mm, 4880 mm, 6100 mm and 7320 mm.

Depending on the diameter and selected operating speed (from 9-175 r/min), they can move air volumes up to 713585 m³/h.

The recommended installation heights range from 4575 mm up to 24400 mm. The XL³ HV moves air at body height up to 26 m from the center of the fan in all directions.

There is no building space too large or ceiling too high to benefit from the RiteHite*Fans*-Formula.

The unique construction and performance of the XL³ HV can help to address several air movement challenges, while saving money, protecting the environment and improving the work climate. All with a positive return on investment.

In addition the XL³ HV is designed for a very long lifetime expectancy.


1


2


3

Visionary blade design:

- Strong Propell-Aire™ custom light-weight aluminum blades with Vortex Tips (picture 1).
- Sophisticated blade design incorporates tilt, taper and twist to provide consistent maximum airflow across the entire blade length, ensuring a silent operation.
- The upward blade tilt creates a conical airflow that lifts air off the ground, creating a more comfortable environment at body height.
- The uniform airflow eliminates dead air holes under the center of the fan.
- Blade Finish: mill-finish standard, polished aluminium and custom colors are optional.

Sophisticated hub design:

- Extruded, precision-milled aluminum hub and bolt.
- Vibration-reducing material reduces stress to hub by 50% to 75%.
- Sophisticated rotationally-balanced hub to blade connection, a design with a 40-year track record in harsh conditions world-wide.
- The blades are seated in a secure position on hub arm, locked with a bolt that is tightened to 271 Nm.


4

Safety features:

- Three-way motor-to-hub safety connection (picture 2 and 3):
  - Hub attaches to motor with reverse threaded bolt and a tapered bushing.
  - The safety ring provides a back-up motor to hub safety connection.
  - Each blade arm is attached to the safety ring.
- The beam clamp, drop tube, motor housing, stabilizing steel cables (4) and safety steel cables (2) offer the highest degree of operational safety and allow for easy installation in almost any building configuration (picture 4).
- Designed with safety, for over 10 times the force and stress generated by the XL³ HV.

Control stations and technical specifications, please see page 14 and 15.

▼ Production facility

Warehouse facility ▲

Distribution center ▲

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Retail facility ▲

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with

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STYLE COMBINED WITH PERFORMANCE

XL³ FAN SP

Diameter	2440 mm	3050 mm	3660 mm
Model	4 Blades		
Air speed	See Zone Model for air speed, page 17		
Air flow (maximum)	84960 m³/h	127440 m³/h	169920 m³/h
Revolutions	20–120 r/min	17–100 r/min	13–80 r/min
Torque (maximum)	68 Nm		
Weight	64 kg	66 kg	68 kg
Installation height	3050 mm till 9150 mm (measured from finished floor to bottom of blade)		
Unit height (standard)	1190 mm (installation with beam clamp),1005 mm (ceiling truss mounting kit)		
Drop tube (standard)	460 mm		
Distance bracket – blade (tip) - At rest position - At full speed	 1015 mm 1015 mm	 1015 mm 1000 mm	 1015 mm 980 mm
Distance truss – blade (tip) - At rest position - At full speed	 830 mm 830 mm	 830 mm 815 mm	 830 mm 795 mm
Minimum height airflow (at full speed)	610 mm	915 mm	915 mm
Blade	Aluminum polished, colors are optional		
Steel construction	Powder coated, RAL 9005 (Black), motor shroud included as standard		
Control system	Variable-frequency drive, Schneider Electric type Altivar, EMC filter and line reactor are included as standard		
Power supply	230V/50Hz/16A, 1Ph/N/E		
Motor specification	0,75 kW, F.L.A. 3,20A (maximum)		
Decibels	38 dBA to 43 dBA depending on the speed, measured 6100 mm below and 6100 mm from the fan's center away		
Coverage	Up to 725 m², 15.2 m from the center of the fan in all directions		
Warranty	Lifetime warranty on blades and hub 10 Year warranty on steel construction 3 Year warranty on other parts, including a 1 year warranty on labor costs		
Approval CE	European directives: 2006/42/EG, 2006/95/EG, 2004/108/EG European standards: EN 60204-1, EN 12100-1, EN 12100-2, EN 13857, EN 349, EN 954-1		

The XL³ Fan **SP** combines „**S**tyle and **P**erformance".

The XL³ Fan SP is designed for smaller spaces with public where look and feel are important considerations.

The twisted polished aluminium blades create a distinct appearance.

The recommended installation height ranges from 3050 mm to 9150 mm. XL³ Fans SP are available with 3 diameters: 2440 mm, 3050 mm and 3660 mm.

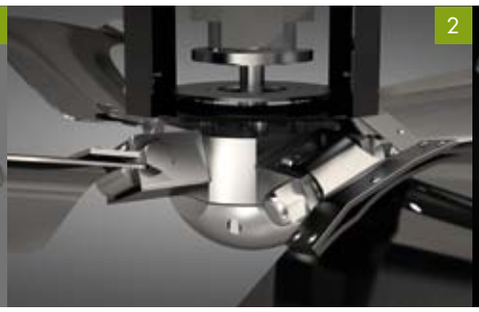
Depending on the diameter and selected operating speed (from 13-120 r/min), they can move air volumes up to 169920 m³/h.

A single XL³ SP can cover a radius of more than 15 m from the centre of the fan in all directions.

The benefits of the RiteHite*Fans*-Formula will work in any application.

In building spaces with a ceiling height of up to 9 m, the choice between a XL³ HV or XL³ SP also depends on your taste.


1


2


3

Visionary blade design:

- Contemporary aluminum polished blade design with Vortex Tips combines style with performance (picture 1).
- The stylish design ensures a silent operation and a very comfortable air movement at body height (picture 3).
- Ideally suited for the upgrading of existing buildings.
- Optimum supplement to existing HVAC systems (Heating, Ventilation and Air Conditioning systems).
- Custom colors are available upon request.

Sophisticated hub design:

- Extruded, precision-milled aluminum hub and bolt (picture 4).
- Vibration-reducing material reduces stress to hub by 50% to 75%.
- Sophisticated rotationally-balanced hub to blade connection, a design with a 40-year track record in harsh conditions world-wide.
- The blades are seated in a secure position on hub arm, locked with a bolt that is tightened to 102 Nm.


4

Safety features:

- Three-way motor-to-hub safety connection (picture 2 and 4):
  - Hub attaches to motor with reverse threaded bolt and a tapered bushing.
  - The safety ring provides a back-up motor to hub clevis safety connection.
  - Each hub clevis is connected to the central hub with two bolts.
- The beam clamp, drop tube, motor housing and safety steel cables offer the highest degree of operational safety.
- Designed with safety, for over 10 times the force and stress generated by the XL³ SP.

Control stations and technical specifications, please see page 14 and 15.

▼ Sports facility

Lobby ▲

Fitness center ▲

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Salesroom ▲

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with

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XL³™ Fan

With **XL³ Basis** and **XL³ Basis Eco** we provide easy-to-operate control stations for the XL³ Fans HV and SP.

›› XL³ Basis

XL³ Basis (picture 1) is a control station with membrane switches for easy operation of the XL³ Fans HV and SP. Functions include the adjustment of speed, selection of forward and reverse motion as well as a switch to turn the fan on or off. Fan speed is displayed with LED lights.

With XL³ Basis, up to 4 XL³ Fans HV or SP can be operated synchronized from one control station. In addition, for every XL³ HV or SP a control box with integrated frequency drive and a separate station for fan motor disconnect is provided.

1

Control Stations	Width [mm]	Height [mm]	Depth [mm]
XL³ Basis	120	120	45
XL³ Basis Eco	240	130	80
Control box	390	455	215

*With **XL³ Basis** and **XL³ Basis Eco** you can control your clever climate.*

›› XL³ Basis Eco

This intelligent control station allows you for optimum benefit of the RiteHite*Fans*-Formula (picture 2).

Up to 18 XL³ Fans in 3 separate target zones can be easily controlled from a central control station. There is no more need to visit each location individually, which may be great distances apart.

2

Three types of operation are possible:

Manual operation: The performance of each XL³ can be easily and individually adjusted from 1% to 100% using the touch screen (picture 3 and 4). Other settings are on, off and forward or reverse motion.

Time scheduled operation: For every day of the week you can schedule individual time profiles for the fans to operate or to shut down (picture 5). The performance for each XL³ Fan in the network can be individually adjusted.

With the time scheduled operation the fan network can be started and stopped twice per day (ex. deactivation during lunch breaks).

Automatic operation: The XL³ Basis Eco is capable of changing the fan operation based on the temperature and/or relative humidity in up to 3 separate target zones in your building (picture 6). As soon as the adjustable key values are reached the fans will start to operate, speeds will be increased or decreased and the fans may be shut down (picture 7). Every 10 minutes the measured values are communicated to automatically adjust the fan performance.

OVERVIEW XL³ BASIS ECO

3
▲ Individual performance

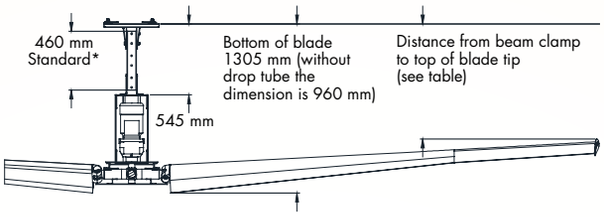
4
▲ Adjustment of fan performance

5
▲ Time scheduled operation

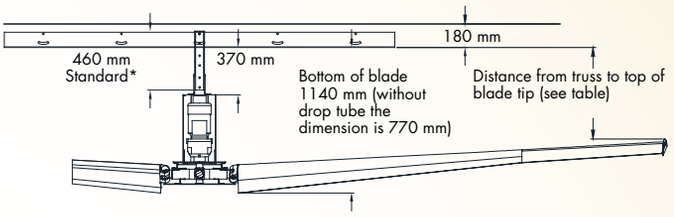
6
▲ Target zone settings

7
▲ Temperature settings

XL³ FAN HV (Installation with beam clamp)



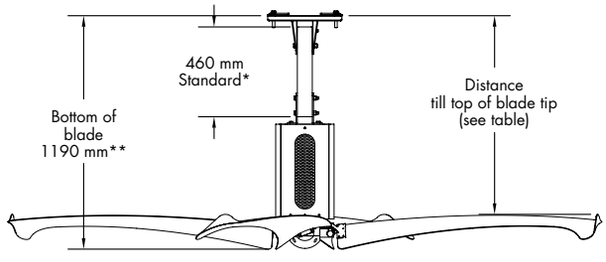
XL³ FAN HV (Installation with ceiling truss mounting kit)



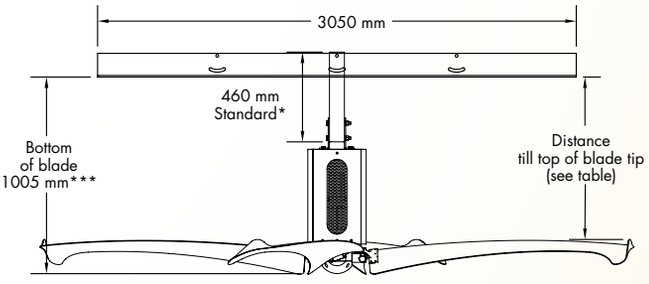
XL³ Fan HV				Installation with beam clamp		Installation with ceiling truss mounting kit	
Specifications				Distance from beam clamp to top of blade tip		Distance from bottom of truss to top of blade tip	
Diameter [mm]	Air flow [m³/h]	Revolutions [r/min]	Weight [kg]	At rest position [mm]	At full power [mm]	At rest position [mm]	At full power [mm]
2440	135920	26–175	122	1065	1065	915	915
3660	254855	17–115	126	1015	940	840	765
4880	382280	13–90	129	965	840	790	660
6100	535190	10–70	133	915	740	740	560
7320	713585	9–60	136	865	635	685	460

* For specific application the drop tube can be removed or cut down. Optional extension kits are available from 460 mm up to 6100 mm

XL³ FAN SP (Installation with beam clamp)

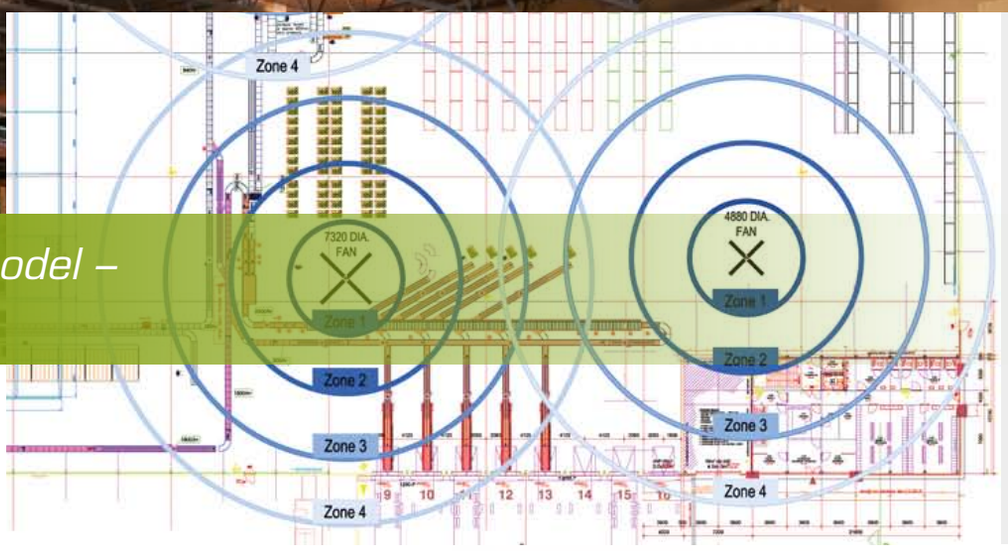


XL³ FAN SP (Installation with ceiling truss mounting kit)



XL³ Fan SP				Installation with beam clamp		Installation with ceiling truss mounting kit	
Specifications				Distance from beam clamp to top of blade tip****		Distance from bottom of truss to top of blade tip****	
Diameter [mm]	Air flow [m³/h]	Revolutions [r/min]	Weight [kg]	At rest position [mm]	At full power [mm]	At rest position [mm]	At full power [mm]
2440	84960	20–120	64	1015	1015	830	830
3050	127440	17–100	66	1015	1000	830	815
3660	169920	13–80	68	1015	980	830	795

* For specific application the drop tube can be removed or cut down.
** Without drop tube this dimension is 845 mm.
*** Without drop tube this dimension is 820 mm.
**** Optional extension kits are available.

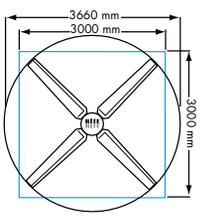


Planning guide zone model – ***XL³ Fan HV and SP.***

Our specialists can help to recommend the XL³ Fan specifications. It is important to match a building's requirements with the fan's performance characteristics to help guide your selection.

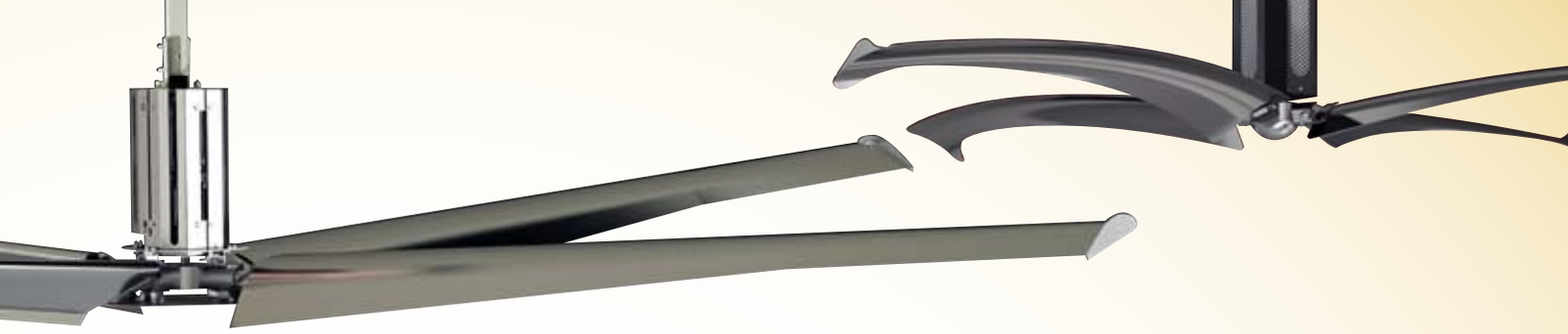
General considerations:

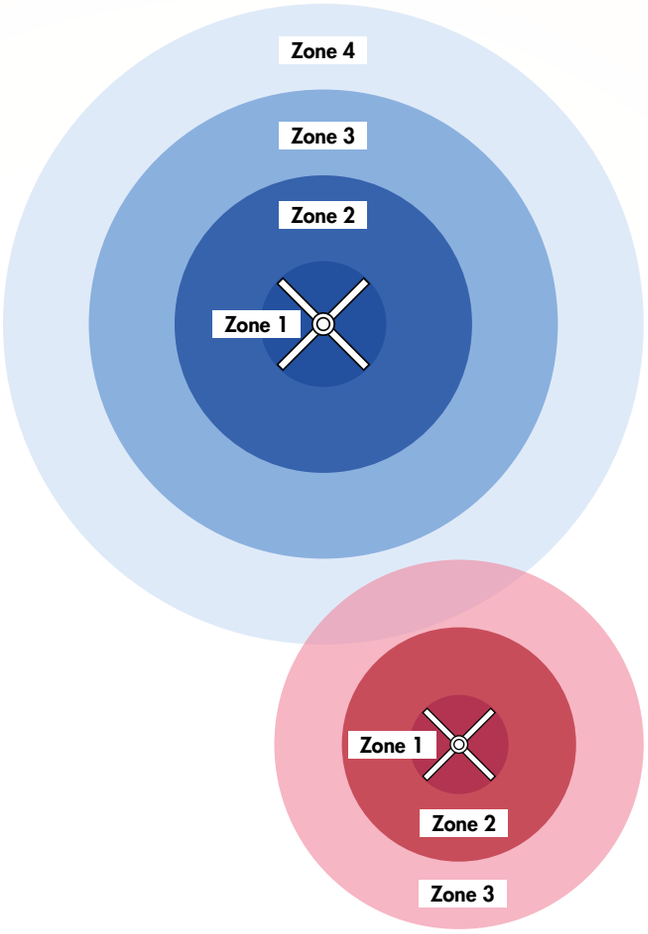
- Size does matter, larger diameter XL³ Fans will move more air and increase the effective coverage radius in all directions.
- The higher the operating speed (revolutions) the more air will be moved by the XL³, the maximum airflow is distributed below the blades of the fan. The performance will decrease if people move further away from the central zone to the outer zones. XL³ Fans operating speeds are flexible and can be adjusted precisely.
- XL³ Fans with smaller diameter can be most effective in specific work areas, smaller building spaces or buildings where installation space is limited.
- The XL³ Winter-Effect (page 4 and 5) is obtained by the XL³ at low operating speeds (revolutions) by an air speed from 0.25 m/s.
- The XL³ Summer-Effect (page 4) is obtained by the XL³ at low operating speeds (revolutions) by an air speed from 0.25 m/s.
- For active cooling during warmer months (page 9), higher air speeds are required. The increase in air speed from 0.90 m/s to 1.35 m/s delivers the equivalent of a 4°C to 6°C decrease in building space temperature. For industrial buildings we recommend an air speed of 0.9 m/s in the target zone. For public buildings at ambient conditions higher air speeds create a greater cooling effect.
- A drying effect can be obtained in all zones.



Other considerations:

- Obstructions (racking systems, etc.) in the coverage area influence the ideal conical air movement of the generated airflow by the XL³ Fans. More clearance around and above the fan will increase the operating efficiency of the fan.
- To obtain an optimum and turbulent free air movement, we recommend maintaining a clearance of at least two fan blades lengths from walls or solid obstructions.
- Building/Roof construction must be suited for installation of XL³ Fans according to our guidelines.
- We recommend centering XL³ Fans in light or sprinkler grids when possible (example: a XL³ diameter of 3660 mm fits into a 3000 mm grid).





PLANNING GUIDE ZONE MODEL

XL³ Fan HV

Zone 1 6.1 m radius (116 m²)

Zone 2 12.2 m radius (465 m²)

Zone 3 18.3 m radius (1023 m²)

Zone 4 26.0 m radius (2046 m²)

XL³ Fan SP

Zone 1 Diameter fan

Zone 2 7.6 m radius (181 m²)

Zone 3 15.2 m radius (725 m²)

Zone model XL³ Fan HV (4 Blades): Air speed

Diameter	7320 mm		6100 mm		4880 mm		3660 mm		2440 mm	
Speed setting	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]
Zone 1	3.05	1.25	2.55	1.25	2.64	1.39	2.15	1.39	2.01	1.03
Zone 2	1.97	0.85	1.52	0.76	1.79	0.76	1.25	0.49	1.03	0.36
Zone 3	1.30	0.63	1.21	0.63	1.21	0.49	1.03	0.36	0.90	0.27
Zone 4	1.03	0.36	0.94	0.36	0.94	0.27	0.90	–	0.72	–

Installation height XL³ HV at 9150 mm from finished floor

Zone model XL³ Fan SP (4 Blades): Air speed

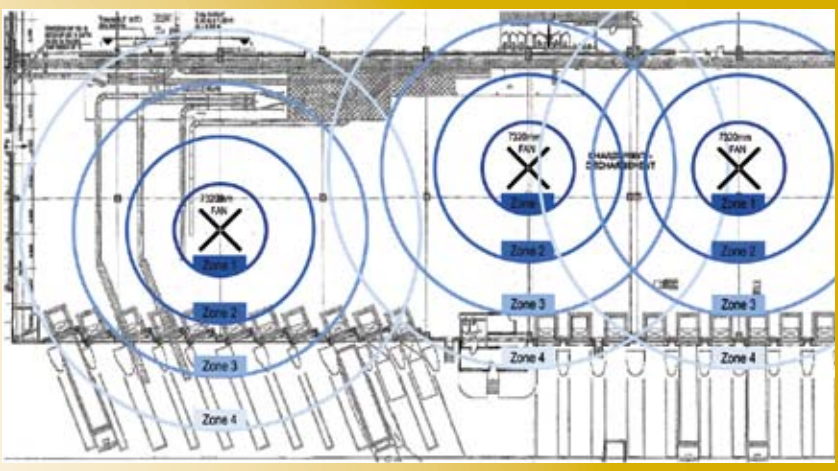
Diameter	3660 mm		3050 mm		2440 mm	
Speed setting	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]	Full power [m/s]	Half power [m/s]
Zone 1	1.83	1.12	1.79	1.03	1.74	0.99
Zone 2	0.67	0.49	0.49	0.27	0.40	0.27
Zone 3	0.58	0.40	0.49	0.27	0.40	–

Installation height XL³ SP at 4575 mm from finished floor

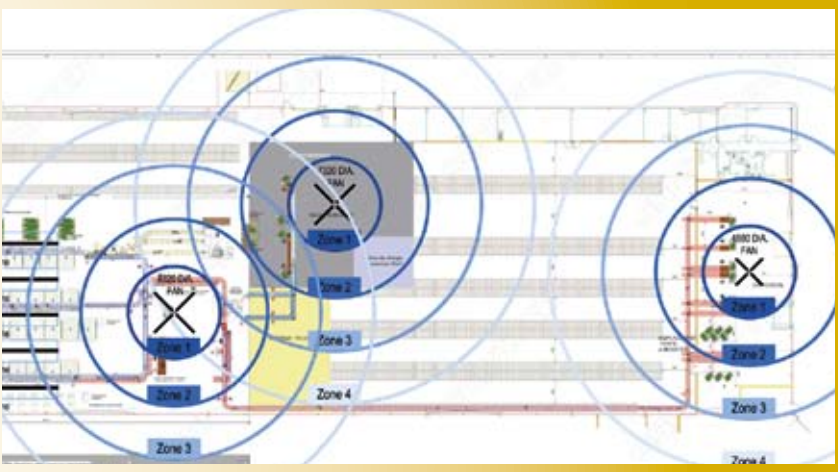
The indicated values for wind speed are based on:

- The air speeds are the average velocity for each XL³ Fan in the zone.
- The air speeds were measured at 1220 mm height over the finished floor.

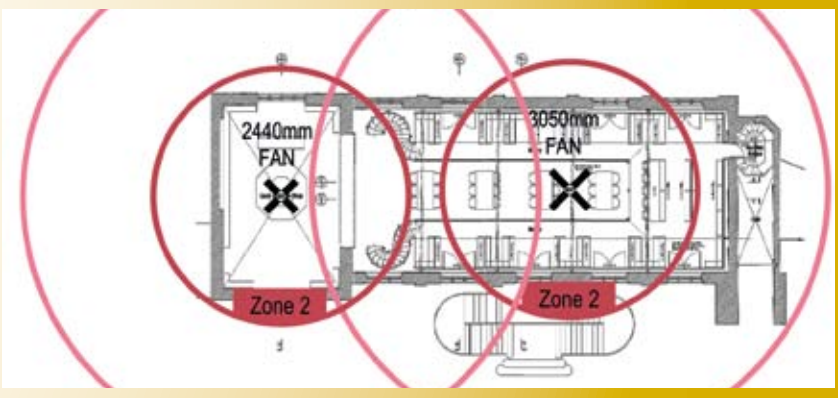
Planning examples:



Commissioning area at logistics facility
XL³ Fan HV



Commissioning area and high bay racking warehouse at logistics facility
XL³ Fan HV



Library at university
XL³ Fan SP

Fitness center
XL³ Fan SP

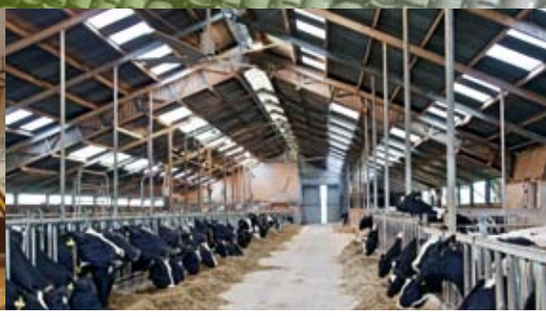
Warehouse / Logistics facility ▲

Clever Climate!
with

RITE-HITE FANS

XL³™ Fan

Discover the wide variety application areas –
***XL³ Fans by* Rite-Hite Fans.**



Our* RiteHite*Fans*-Formula *has proved to be successful for our customers – the evidence:

This is clearly confirmed by our customers, because most of our customers are "repeat business" customers. The proven product design confirms: Once having installed a XL³ Fan in a building space means – more building spaces are to follow…

Extract from our reference list – Customers using the XL³ Fans in many of their building spaces:

3M
ALDI
Bloominess
Bosch
Bridgestone
Caterpillar
Coca Cola
FedEx
Forbo
Hagemeyer
Honeywell
Johnson Controls
Kellogg's
Knauf
Magna
Mc Graw Hill
Michelin
Mitsubishi
Nestlé
Pepsi Cola
Saint Gobain
Schenker Logistics
Schneider Electric
Toyota
Unilever
Ubbink
Whirlpool

Typical applications for XL³ Fans:

- Production facilities
- Warehouses and distribution centers
- Agriculture facilities
- Sport centers
- Convention centers
- Fitness centers
- Schools
- Universities
- Stadiums
- Auto dealers
- Lobbies and atriums
- Retail
- Libraries
- Hotels
- Theaters
- Bars and restaurants
- Hospitals
- Airports

and many other applications…

ABOUT THE RITE-HITE GROUP OF COMPANIES

Rite-Hite has established two business areas in Europe:

- Loading dock products, industrial doors and safety products via Caema Verladesysteme GmbH with headquarters in Volkmarsen (Germany).
- Material handling solutions for general cargo via Caljan Rite-Hite Denmark ApS with headquarters in Hasselager (Denmark).

▲ Overview of Rite-Hite product offerings

Rite-Hite Fans:

Rite-Hite Fans is a subsidiary of Rite-Hite Holding Corporation and develops, manufactures and markets XL³ Fans and other related products.

The central Research & Development and production facilities are located in Peosta, Iowa (USA). The European headquarters are based in Twello, The Netherlands.

The employees of our local representatives are experts in the planning, installation and service of our XL³ Fans at the customer sites.

An important part of Rite-Hite's success story is the strong emphasis on research and development, leading to new products that pioneer the industry. It was this focus that lead to the development of our XL³ Fans.

In large building spaces, the optimum ventilation, climate control and heating are important topics. With our XL³ Fans we have developed a product that helps save money, protects the environment and improves the work climate.

In 2006 the XL³ Fan HV was introduced as solution for really large industrial building spaces with ceiling heights up to 25 meters.

In 2010 the design alternative XL³ SP for commercial building spaces with ceiling heights up to 10 meters was introduced.

Consult with our local representatives for a planning of each specific application and building space for the optimum XL³ Fan configuration.

Headquarters for Rite-Hite:

Rite-Hite Holding Corporation, headquartered in Milwaukee, Wisconsin (USA), is a recognized market leader in the manufacture and sale of loading dock products, industrial doors and safety products.

The family owned company was founded in 1965 by Arthur K. White, father of Rite-Hite's present owner and Chairman Michael White.

Rite-Hite directly employs over 1400 people world-wide and maintains more than 30 different representative organizations at over 100 locations throughout North and South America, Asia and Europe.

▲ The Rite-Hite headquarter in Milwaukee

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RITE-HITE FANS
XL³™ Fan

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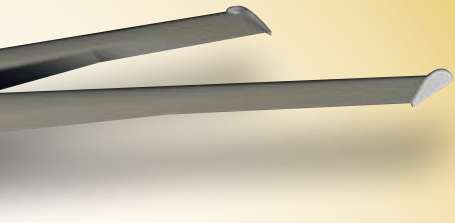


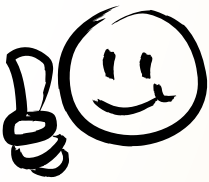
XL³ Fan =

Saves money

X

Protects the environment

X



Improves work climate

Clever Climate!

with

RITE-HITE FANS

XL³™ Fan