

# The HEAT is on.

SOUTHWEST SOLUTIONS GROUP  
business organization systems



## Our system will cool you off.

Large Diameter Fan • 7FT Directional Fan • Tempest Exhaust Turbine

### Heat & Productivity

According to a study conducted by a professor at Waseda University in Tokyo, for every degree rise in temperature above 77°F productivity drops by 2%! At 90°F, your productivity goes down 12.6%. What is your current room's temperature? *How much of a loss is your hot facility creating?*

Source: <http://www.nytimes.com/2012/08/19/sunday-review/air-conditioning-is-an-environmental-quandary.html?smid=pl-share>

		Relative Humidity (%)									
		10	20	30	40	50	60	70	80	90	100
Temperature (F)	106	100	106	114	124	137	153	172			
	104	98	103	110	119	131	145	161	181		
	102	96	100	106	114	124	137	152	169		
	100	94	97	102	109	118	129	143	158	176	
	98	92	95	99	105	113	123	134	148	164	181
	96	90	93	96	101	108	116	126	138	152	138
	94	89	90	93	97	103	110	119	129	141	155
	92	87	88	90	94	99	105	112	121	131	143
	90	85	86	88	91	95	100	106	113	122	132
	88	84	85	86	88	91	95	100	106	113	121
	86	82	83	84	85	88	91	95	100	105	112
84	81	81	82	83	85	88	90	94	98	104	
82	79	80	80	81	83	84	86	89	92	96	
80	78	78	79	80	81	82	83	84	86	89	
78	76	76	77	77	78	78	79	80	80	81	
76	74	74	75	75	76	76	77	77	78	78	
%	10	20	30	40	50	60	70	80	90	100	

### Heat Related Injuries

This Heat Index Chart illustrates how hot weather feels to the body relative to the temperature and humidity. At these high levels, heat related injuries can occur.

According to OSHA, Heat Stroke, Heat Exhaustion, Heat Cramps, Heat Collapse, Heat Rashes, and Heat Fatigue are just a few heat related disorders that can affect your workers.

**Ventilation** and **Airflow** are two of OSHA's suggested solutions to control your facility's Temperature.

Source: [https://www.osha.gov/dts/osta/otm/otm\\_iii/otm\\_iii\\_4.html#2](https://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_4.html#2)

Classification	Heat Index/ Apparent Temperature	General Affect on People in High Risk Groups
Extremely Hot	≥ 130°F	Heat/Sunstroke HIGHLY LIKELY with continued exposure
Very Hot	105°F - 129°F	Sunstroke, heat cramps, or heat exhaustion LIKELY, and heatstroke POSSIBLE with prolonged exposure and/or physical activity
Hot	90°F - 104°F	Sunstroke, heat cramps, or heat exhaustion POSSIBLE with prolonged exposure and/or physical activity
Very Warm	80°F - 89°F	Fatigue POSSIBLE with prolonged exposure and/or physical activity

Source: [www.srh.noaa.gov/srh/jetstream/global/hi.htm](http://www.srh.noaa.gov/srh/jetstream/global/hi.htm)

Don't just move your hot air, REMOVE it.

# De-stratify to Satisfy

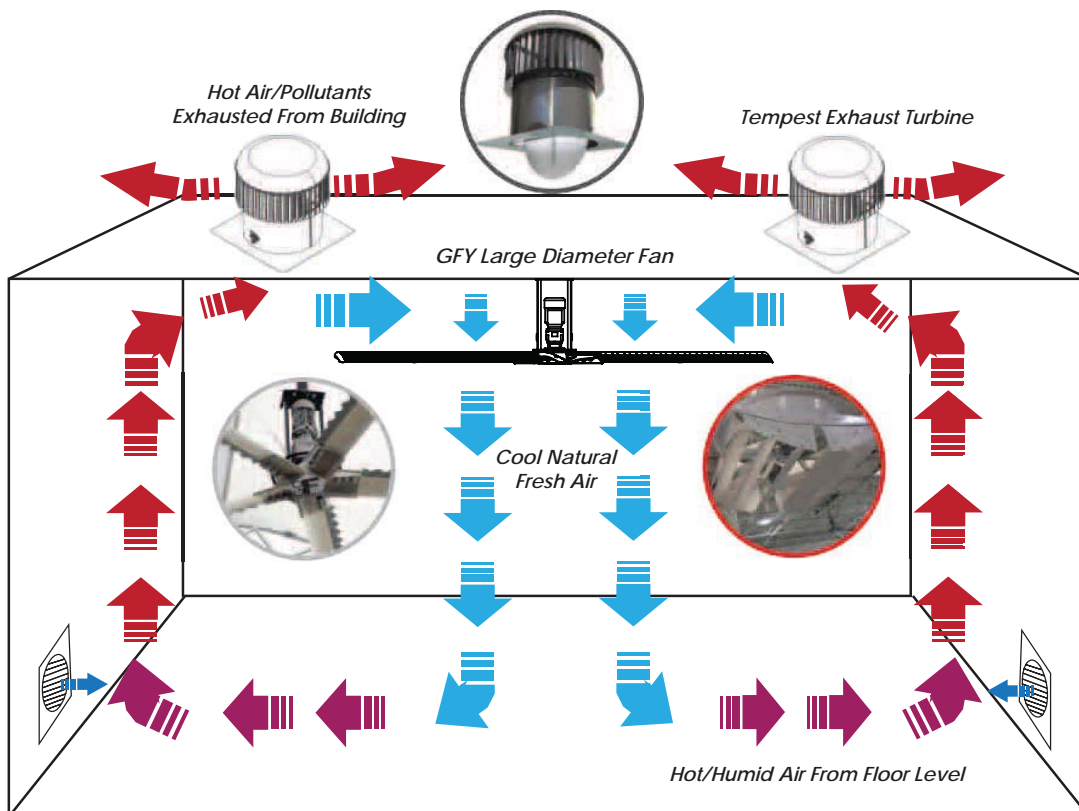
## How does it work?

When you combine the Large Diameter Fan *or* the 7ft Directional fan with the Tempest Exhaust Turbine, you create an effective system that destratifies your facilities air, while also providing ventilation.

The Tempest Exhaust Turbine acts as a ventilation system by pulling out the hot, humid, and stagnant air replacing it with clean fresh air.

The fan will then blow this new cool, natural, fresh air throughout the facility therefore destratifying the air and lowering the ambient temperature by up to 10°F

**A cooler facility = Higher Productivity and Employee Satisfaction.**



### De-stratify [de-strat-uh-fahy]

The process of mixing internal air within a facility to eliminate stratified layers of air and create an even ambient temperature.