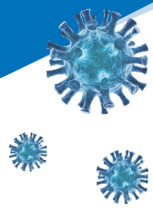
The ABC's of Creating a Healthy School Environment

TE SERIES

Back to School with 40-60%RH

The TE Series Humidifier Creates Safe and Productive Classrooms.



The TE Series is easily installed in:

- Classrooms of all sizes
- Administrative offices
- Libraries /Computer rooms
- Cafeterias and lunch rooms
- Any room in your school

Students and teachers spend the majority of their school day inside, making indoor air quality, including correct temperature and humidity levels, critical to health and comfort. Without precise humidification management, school facilities that are air conditioned during the summer and heated in the winter are likely to struggle with sub-optimal humidity. Continuous exposure to a humidity level below 40%RH will negatively affect the health and comfort of school staff and students. A high absence rate and decrease in productivity are common results.

When the humidity in schools is outside of the **optimal range of 40-60%RH** the most common first side effect of dry air is electrostatic shock. Further, less apparent symptoms can include itchy skin, sore eyes and sinuses, contact lens discomfort, dull hair, and increasing dehydration. Those that suffer from allergies or asthma may also have more predominant systems. Maintaining optimal humidity levels is proven to prevent these symptoms which will keep teachers and student comfortable. But even more importantly a **40-60%RH decreases the danger of airborne viruses**, such as influenza, keeping classrooms healthier.

The indoor climate in your school is the first line of defense against viruses such as influenza and other corona viruses. Research by the scientific community shows that a minimum indoor humidity limit between 40% - 60%RH, is the optimum threshold for inhibiting the spread of respiratory viruses. This is a threshold that many schools drop below.

Relative humidity decisively affects the ability of viral aerosol to remain suspended in indoor air. Unlike the larger and heavier infectious droplets produced by coughing or sneezing, which fall to the ground after a few seconds, lighter and smaller aerosols can stay suspended in the air for hours at a time.

Aerosols consist of water, dissolved salts and proteins. At a relative humidity of under 40%, aerosols are unable to retain this water and there-fore dry out. This produces dry aerosols, which are smaller and lighter, and which can float through indoor air for longer. Unlike larger droplets, their lower water content also makes them less 'sticky' and so they cannot bond together so readily.

Humidification, dehumidification
and evaporative cooling

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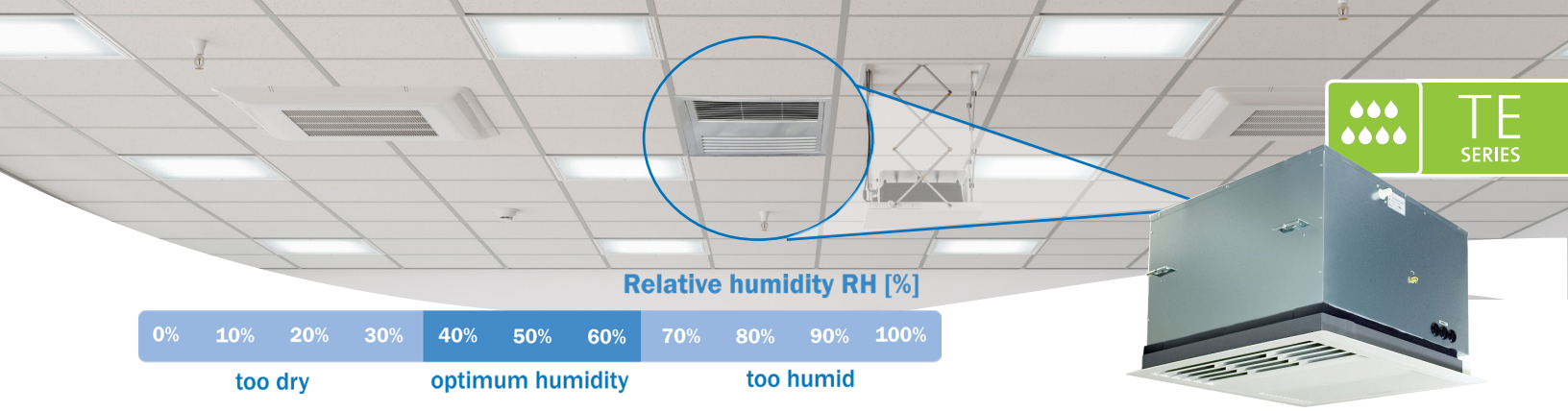

Relative humidity RH [%]

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
too dry				optimum humidity			too humid			

Air flows and the movements of people in classrooms also mean that dry aerosols are swept off surfaces more quickly and can therefore spread further.

To learn more about the benefits of creating a healthy classroom with 40-60% RH visit www.condair.com/healthybuildings.

The TE Series is an easy solution to protect your school.

The TE Series (Tile Evaporative) by Condair is a self-contained ceiling mounted humidifier that has been designed with classrooms in mind. This humidifier is a simple solution to achieve precise humidity control to create healthy environements for small and medium applications. The TE Series is easy to install, ideal for retrofits, is easy to operate, reliabile, and energy efficient.

This ceiling mounted, evaporative media humidifier has been specifically designed to provide humidification at a low cost. In fact, it is one of the lowest energy consuming humidifiers on the market, decreasing direct energy costs by 95%, when compared with steam humidifiers.

When the TE Series humidifier is operating, dry air is drawn from the environment, passing through a wetted media cassette, where water is evaporated into the air stream.

The TE series is a direct feed system without water recirculation. For extended media life, the frequency of the drain can be adjusted according to the supply water quality which will help prolong media life.

Each unit is designed to humidify a space directly, and fits most standard suspended ceilings for discrete operation, saving space. The humidifier can also be installed in open ceilings. Control of the TE Series is made easy through a wall mounted remote controller, which includes an integrated humidistat.

Features

- Innovative design – Self-contained humidifier
- Evaporative media ensures quiet and safe operation
- Polyester media can be washed and reused
- Modulating control
- Wall-mounted remote controller
- Hygienic design eliminates stagnant water
- Modular, expandable design – Apply as many or as few as needed

Benefits

- Cost Savings - Low energy consumption (97W)
- Compact design - Easy to install and service
- Hidden installation – No usage of floor or wall space
- Low noise operation. It meets a Noise Criteria (NC) max value of 40 dB(A) and can be used where a silent atmosphere is required
- Direct room humidification ensures accurate control
- Ideal for retrofits - Central ventilation systems are not required
- No Pre-heat source required

Applications

- Retrofits
- Bundles with VRV and radiant heating systems
- Independent of any HVAC equipment, can be used for localized humidification needs
- Easy to install in a standard 2'x2' or 2'x4' tile space*, drywall and open ceilings

*Trimming of the grid system or plastic flashing might be required

Installation

- The Condair TE series is available in one size for quick and easy installation - 5 lb/hr (2.2 kg/h)

Every back to school checklist should include a humidifier. Contact us today for your free quote.

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