



## Why Humidify?... For Bakeries and Baked Goods

Your Baking Recipes Should Include a Dash of Humidity

In the competitive baking industry, the right room conditions can give you an advantage. Successful bakeries not only have the most skilled chefs, and award winning recipes, they also have controlled environments.

If relative humidity (RH) levels are too high or low, air will be overly moist or dry. Maintaining a balanced RH is critical to bakeries and should be monitored during every step of the baking process, from storing to proofing to baking.

### Storage

The need to maintain relative humidity levels begins before the baking starts, in the storage room. Many ingredients perform their best and maintain their quality when relative humidity levels are optimized. Otherwise, ingredients decrease in quality, increase in water weight and become susceptible to mold and spoilage.

The conditions in which you store and handle the finished baked product is also important, as temperatures and humidity levels affect their shelf life. Overly humid conditions soften crisp crusts, and make cookies lose their crunch. If the area lacks humidity control, the goods could also develop mold quickly. Overly arid conditions dry out goods that consumers expect to be soft and moist, such as cakes and pastries.

Bakeries benefit from using humidification systems that will allow the bakery to control the relative humidity in individual areas.

### Dough Preparation and Proofing

Yeast is a live organism and is sensitive to its environment so bakers often use dough fermentation rooms, proofing cabinets, or proofers to gain greater control over how yeast performs. Furthermore consistent humidity is critical for dough quality due to the water it contains. If humidity levels are too high or too low air bubbles inside the dough can develop and the dough can dry out which will produce a harder crust, resulting in a low quality bread, roll, or pastry

Dough fermentation rooms require relative humidity levels of at least 75% RH while proofers require at least 80% RH to prevent skins from forming on dough during the final proofing stages.

### Baking

Humidity levels come in to play during the baking process as well since the amount of water vapor in an oven affects baking times and the finished



product. The type of oven you have needs to be considered when looking at humidity levels as forced convection ovens have relative humidity levels of 30 to 60 percent with lower temperatures, and natural convection ovens have humidity levels of 90 to 95 percent with higher temperatures. When humidity levels are higher, baking times are longer because of moisture evaporation and gluten coagulation in the crust is slower. Installing a humidification system in your baking room can eliminate consistent humidity levels which can result in goods over-baking, making them too tough.

### [Ensure Healthy and Comfortable Employees](#)

With an adiabatic humidifier or evaporative cooling system bakeries and factories can ensure that they reduce flour dusting. Flour dust can

cause bakers to develop allergies to flour dust which can result in respiratory issues and cause employees to take sick leave. Humidifiers can reduce flour dust as the water from the system will bind to the dust, increase its weight, and cause the dust to drop to the ground. This has a profound effect for anyone allergic to flour dust and employees who desire better working conditions, ensuring that cooks and employees are comfortable.

### [Ensure Visual Appeal to Customers](#)

In the baking industry, businesses need to continually move product as breads and other baked goods typically have shorter shelf lives. Proper humidification will ensure that finishes and decorative additions look pristine, therefore encouraging customers to feel confident in

# Effective Humidification Solutions for Bakeries and Baked Goods

purchasing product. Visual appeal plays a key role in successful bakery operation, as product appearance helps to drive sales.

## Regulated Indoor Humidity

Depending on the size of the environment, some bakeries may require humidifiers with greater load capacities. Nortec has a highly efficient humidifier suitable for every capacity, with every type of humidification technology available at your disposal, from gas and/or electric-powered humidification to adiabatic cooling. With a system installed that suits the bakery application in question, it's easy to precisely control RH and ensure that air quality benefits baked goods.

## Effective humidity control in your bakery poses a long list of benefits including:

- Dough proofer
- Chute/funnel
- Near the oven(s)
- Preparation area(s)
- Anywhere employees work



## About Condair

Condair manufactures a comprehensive range of humidifiers and evaporative cooling systems across all humidification technologies. With years of experience working within a variety of building types, Condair's humidification engineers will provide the right solution to meet the unique needs of your application.

Contact us today and ensure you have the best humidification solution for your facility.



**Visit [condair.com](https://www.condair.com) - Live chat available 24/7**

**Chat with us today and request your free humidity assessment.**

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