

Choosing the Right Ventilation for Your Metal Building

When planning to set up a metal building, there are numerous factors to consider. Where you build, how tall, and what color are all things you need to have decided on before you break ground, but perhaps one of your metal building's most essential aspects is deciding on the right ventilation system.

Thankfully, [Brand Name] has a long history of helping clients choose the right ventilation for their building, and our qualified and trained design consultants are ready to walk you through the process. But before we get into specifics, we first must understand why ventilation is a crucial aspect of construction.

Ventilation Systems and You

By nature, metal buildings are inclined to retain condensation and heat than non-metal buildings. This is why proper, reliable ventilation systems play such an important role. They're necessary to reduce humidity, maintain airflow, and regulate indoor temperature.

How Ventilation Works

Before we get into the various kinds of ventilation systems to choose from, first, let's go over the basics of what they do. At their core, ventilation systems regulate airflow. Air circulation displaces excess heat and moisture, moving fresh air to create a comfortable, cool atmosphere indoors. The heat and humidity rises and escapes through a vent or exhaust fan.

Insulation also plays a vital role in controlling temperature, but it also creates a problem on its own. While it prevents the transmission of heat through your metal building's walls, insulation can stifle airflow. Proper ventilation allows the elements to escape.

How Much Ventilation Do You Need?

Most buildings utilize the general rule of one square foot vent opening for every 150 square feet of roof. But general rules don't always cover all aspects of a particular building. How much ventilation required is going to depend on your building's size, what it's used for, and the humidity levels in your area.

Depending on those factors, there are two general types of ventilation. Passive, or unpowered, ventilation is made up of louvered or ridged vents. It's usually chosen for its energy efficiency and lower overall cost, as operating is virtually free. For some purposes, such as manufacturing or livestock, passive ventilation may not produce enough airflow. This is especially true in areas with high humidity. In those instances, louvers can be replaced with supply fans and ridged vents with exhaust to maximize airflow.

The other option is a full mechanical, or powered, ventilation system.

Types of Vents

We've already mentioned a few in passing, but there are three main types of vents that are most commonly used in metal buildings. Most people don't just stick with one, and use a combination of them to create cross-ventilation.

Ridge Vents

The name says it all. Ridge vents are attached to the roof's top ridge to let the hot air escape. Typically available in all colors to match, they're also pre-formed to match the roof's pitch for easy installation. Usually, they include a rain cap and a screen to prevent rain and vermin from getting in. They certainly offer maximum ventilation, which is why they're a bit more expensive than the other options.

Circular Vents

Typically 20 inches in diameter, circular vents usually come with a screen to prevent birds and vermin as they're particularly attractive for creating nests. Due to a circular vent's flat base, they can easily be fit on any roof slope with watertight security.

Louvers

Louver vents are ideal for smaller metal buildings. Used in tandem with turbine vents, they're excellent for creating cross-ventilation in larger steel structures. They typically come in 3x3 or 4x4, and as long as they're unobstructed, they can be installed anywhere on the metal siding of

your building. You should talk with a professional to make sure louvers are right for you before you make your decision.

Get Your Ventilation System Today!

No building is complete without a good central airflow and ventilation system. If you are getting ready to put up a metal building, have you decided on what ventilation system is right for you?

[Brand Name]'s design consultants are ready to help you make your choice, and our fast and free delivery will have you set up in no time. So visit us today!