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POWERED AIRE WHITE PAPER

Vestibule Exception Air Curtains

Construction Challenges in a Post-Pandemic World

Perhaps the best part of the post-pandemic world will be the fact that, on a daily basis, we no longer have to hear the phrases, "these trying times", "social distancing", and "the new normal".

It's almost hard to remember how we operated before the Coronavirus pandemic turned things upside down. For that reason, the reopening process might be something similar to a bear coming out of hibernation. You poke your head out, look around, and see if it's safe to get going. Before long, you're back in "go-mode". This seems to be the case as businesses reopen and construction projects kick into high gear.

WHAT CHALLENGES ARE CONSTRUCTION PROJECTS FACING?

While the original project scope may not have changed, it's a safe bet that the budget and timeframe have. Simply put, more must be done with less.

As if that's not enough, steel, PVC, wood and other building essentials are at a premium. Ultimately, architects, engineers, planners and project managers are scrambling to find ways to save time and reduce costs. Easy to do, right?

Consider Using a Vestibule Exception Air Curtain Instead of Building a Vestibule.

As the name implies and as the ASHRAE/IES 90.1-2019 standard dictates, air curtains can now be used to replace vestibules, helping to save time, money and precious retail space.

In 2019, ASHRAE (the American Society of Heating, Refrigerating and Air Conditioning Engineers) approved the use of properly installed and certified air curtains as an exception to the vestibule requirement. A similar exception was added to the IECC (International Energy Conservation Code) in 2015. These changes were made after independent studies proved that <u>air curtains are</u> <u>equal to or better than vestibules</u> at preventing infiltration in all climate zones.



Click here to read more about the ASHRAE/IES 90.1-2019 Standard



Is There a Way to Eliminate Unnecessary Items From the Blueprint? How Can You Save Time? Where Can You Save On Resources?

While traditional vestibules provide a buffer from the direct outdoors, they are often designed incorrectly and both sets of doors are open simultaniously, which defeats their purpose.

There are three significant drawbacks of vestibules in new construction:

- They take up considerable, and critical, retail space.
- **2** They utilize additional, and expensive, building resources.
- **They require more time and labor during the buildout.**









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Three Key Benefits of Using a Powered Aire Vestibule Exception Air Curtain to Replace a Vestibule in New Construction

SAVE SPACE

Just how valuable is retail space? Valuable enough that it's measured at a "cost per square foot" unit. Depending on the application, every inch of floor space can be critical to sales and profit. When air curtains are used in place of a vestibule in retail settings, valuable space is gained directly in front of the entrance. This space can be used for sales, promotions and other events designed to catch the customers' attention as soon as they enter the store.

2 SAVE MONEY & RESOURCES

While both time and space are somewhat finite, there are always extra measures that can be taken to reduce cost. Perhaps the biggest benefit you'll gain from using an air curtain in place of a vestibule is cost savings. Less resources are required if a vestibule can be removed from the design plan. This includes less manpower, less physical product, and less time spent on the build. Ultimately, these reductions will mean considerable cost savings.

3 SAVE TIME

As mentioned, construction site managers are now expected to accomplish all of their pre-Covid projects - just in an abbreviated timeframe. No big deal, right? One way to save time is to do more with less. Omitting the vestibule and installing an air curtain above entryway doors eliminates time that would be spent constructing the vestibule. This is time that can be allocated to other projects, helping to expedite the timeline.

The Way Going Forward

Most indicators point to construction costs continuing to rise throughout the next six-months. According to a recent article in Fortune Magazine, lumber prices are at an all-time-high, up 188 percent from pre-pandemic numbers. PVC, steel, copper and glass have also experienced significant increases. Vestibule exception air curtains are effective solutions to reduce construction costs associated with vestibules.

It isn't just new construction that can benefit. Adding an air curtain to an existing vestibule will help remedy poorly designed applications where both sets of doors are open at the same time, letting in outside air, dust and debris. Depending on aesthetics, space and design requirements, air curtains can be placed above a door or recessed into the ceiling where they are hidden from view.

While having too much work is certainly better than sitting around waiting for things to pick up, it can certainly be stressful managing projects in the "new normal". Powered Aire's line of Vestibule Exception Air Curtains will help save time, money and resources as construction continues to pick up.

All quotes returned within 24 hours

Email us at: info@poweredaire.com





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To learn more about the benefits of Powered Aire air curtains in vestibule applications, **click here**

