

Channel Blender®

Freeze protection, without the footprint



“The Channel Blender product gave us the competitive advantage to win the contract and successfully install a new AHU at the Marquette University Physician Assistant Studies Building.”

Tim Barham
Sales Engineer
Vyron Corporation

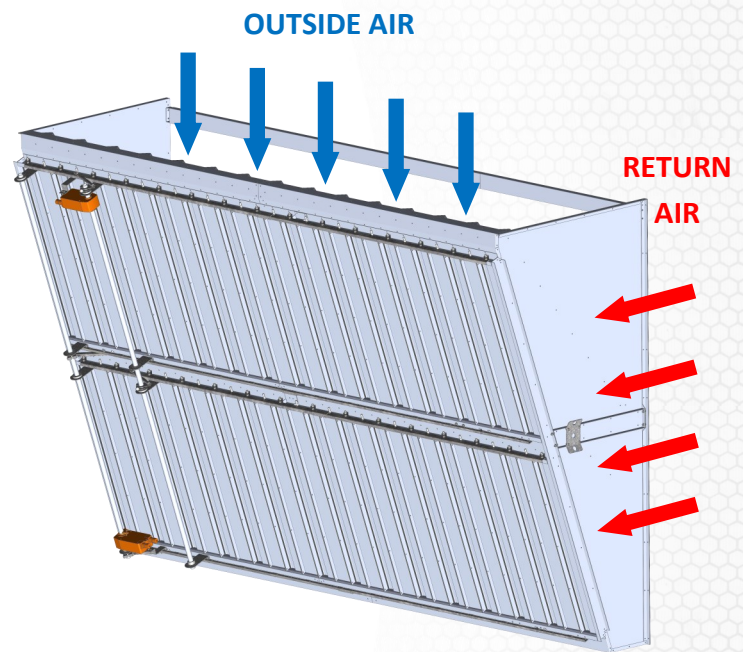


Project Overview

- ◆ Marquette University Physician Assistant Studies Building
- ◆ Milwaukee, WI
- ◆ Installed September 2018
- ◆ Construction Type: New-build
- ◆ AHU Manufacturer: Temtrol
- ◆ Blender Rep: Vyron Corporation

Challenges

- ◆ Limited space available for new air handling unit
- ◆ Eliminate freeze stat trips in cold weather environment and maintain 25% minimum OA air flow requirements
- ◆ Provide sufficient mixing without increasing length of AHU
- ◆ Traditional mixing technologies would have increased tunnel length by over 60”



Channel Blender® Solution

- ◆ Channel Blender installed in mixing section of custom AHU
- ◆ SA Flow: 47,000 CFM
- ◆ Min. OA Flow: 11,750 CFM
- ◆ Mixing Box Dimensions: 103”H x 152”W x 60”D
- ◆ CB Dimensions: 93”H x 136”W x 50”D
- ◆ OA Design Temp: -20°F
- ◆ Minimum Temp downstream of CB: 48°F
- ◆ See back page for performance information

Performance History with Channel Blender[®]

Marquette University Physician Assistant Studies Building

0

- ◆ Number of recorded freeze stat trips after the channel blender was installed during normal operations of AHU.

48

- ◆ Minimum temperature (°F) downstream of Channel Blender as predicted by CFD modeling. See figure below.

0.38

- ◆ Pressure drop (in wc) across the mixing device and integrated dampers at 100% OA flow condition.

2,500

- ◆ Estimated number of hours the Channel Blender[®] is able to extend economizing hours annually.

