



## PROJECT SNAPSHOT

**SITE:** VA Hospital  
Gainesville, FL (AHU-2)

**OBJECTIVE:** Maintain SAT  
setpoint and lower chilled  
water flowrate to CHW coil.

**TYPE:** Knockdown

**INSTALLED:** September 2025

### IMPLEMENTATION NOTES:

- Custom design for AHU and installation requirements
- CB module assembled in one day
- No added tunnel length

### SITE PHOTOS:

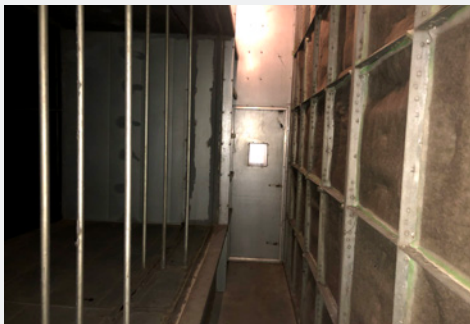


Figure 1. AHU-2 w/out Channel Blender



Figure 2. AHU-2 w/ Channel Blender installed

[BlenderProducts.com](https://BlenderProducts.com)

[info@blenderproducts.com](mailto:info@blenderproducts.com)

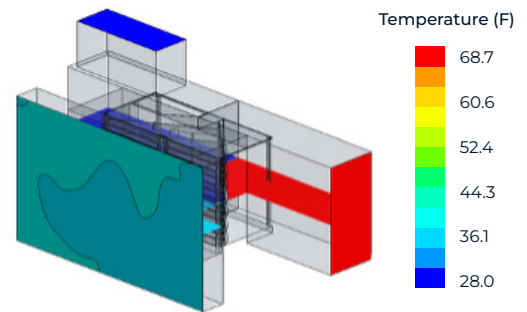
800.523.5705

## KEY TAKEAWAY

**The Channel Blender allows the AHU to maintain SAT at a reduced CHW flowrate.**

- Improved coil efficiency
- Better control of OA entering CHW coil
- Maintain airflow uniformity across a wide range of operating conditions

Figure 3. AHU-2  
CFD Temperature  
Stratification  
Results – Post  
Installation



## RESULTS

**Same SAT, lower CHW flow rate.** In like-for-like conditions after the Channel Blender (CB): CHW valve: 33% open → 22% open (**33% reduction**)

**Net effect:** Reduction in CHW flow frees up capacity for other equipment.

Metric	Before CB	After CB
Ambient Air Temp. (°F)	84°	88°
Supply Air Temp. (°F)	55°	55°
Supply Airflow	56,571	53,202
<b>CHW Flow Rate</b>	<b>33%</b>	<b>22%</b>

### CHANNEL BLENDER BENEFITS:

- **Energy and runtime:** Less chilled water means less energy use.
- **Control stability:** Even mixing improves control precision and reliability.
- **Freeze-risk:** More uniform mixed air raises min temp well above freezing.
- **Better mixing:** Uniform airflow allows the coil to perform at maximum efficiency.